

# Exhibit 9

THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION

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HEADWATER RESEARCH LLC, ) Case No.  
 ) 2:23-CV-00379-JRG-RSP  
 Plaintiff, ) (Lead Case)  
 )  
 v. )  
 )  
 )  
 T-MOBILE USA, INC. and SPRINT )  
 CORP., )  
 )  
 Defendants. )  
 \_\_\_\_\_ )

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REMOTE VIDEO DEPOSITION OF  
DR. DONALD TURNBULL  
FRIDAY, AUGUST 30, 2024  
9:00 A.M. PDT

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Reported by: JULIE RUMSEY, CSR 14144  
Job No. 102656  
PAGES 1 - 131

1 THE UNITED STATES DISTRICT COURT  
2 FOR THE EASTERN DISTRICT OF TEXAS  
3 MARSHALL DIVISION

4 ---oo---

5 HEADWATER RESEARCH LLC, ) Case No.  
6 Plaintiff, ) 2:23-CV-00379-JRG-RSP  
7 v. ) (Lead Case)  
8 T-MOBILE USA, INC. and SPRINT )  
9 CORP., )  
10 Defendants. )  
11 \_\_\_\_\_ )

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16 REMOTE VIDEO DEPOSITION OF DR. DONALD TURNBULL,  
17 located in Vancouver, British Columbia, commencing at  
18 9:01 A.M. PDT on Friday, August 30, 2024, before JULIE  
19 RUMSEY, Certified Shorthand Reporter 14144, in and for the  
20 State of California.

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13 LEGAL VIDEOGRAPHER:

14 KORYN COALSON

15

16 ALSO PRESENT:

17 YI ZHANG, ESQ.

18 ---oo---

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1 INDEX

2 ---oo---

3 EXAMINATION

4 PAGE

5 BY ATTORNEY WANG 7, 129

6 BY ATTORNEY VINCENT 128

7 ---oo---

8 QUESTIONS INSTRUCTED NOT TO ANSWER:

9 PAGE LINE

10 11 15

12 8

11 41 2

12 41 8

12 78 9

13 ---oo---

14 EXHIBITS

15 EXHIBIT DESCRIPTION PAGE

16 Exhibit 1 8/9/2024 Declaration of

Dr. Donald Turnbull

17 30 Pages 24

18 Exhibit 2 8/24/2024 Declaration of

Dr. Donald Turnbull

19 and  
Attachment A - Dr. Donald Turnbull's CV

20 41 Pages 24

21 Exhibit 3 Patent No.: US 8,589,541

100 Pages

22 Exhibit 4 Patent No.: US 9,215,613

23 94 Pages 59

24 Exhibit 5 8/22/2024 claim Construction Order

19 Pages 124

25 ---oo---

1 FRIDAY, AUGUST 30, 2024, 9:01 A.M. PDT

2 ---00---

3 THE VIDEOGRAPHER: We are on the record. This is  
4 the beginning of media number 1 in the deposition of Donald  
5 Turnbull in the matter of -- in the matters of Headwater  
6 Research, LLC, versus T-Mobile Incorporated, et al., as  
7 well as Headwater Research, LLC, versus Cellco Partnership  
8 d/b/a Verizon Wireless and Verizon Corporate Services  
9 Group, Incorporated.

10 This deposition is being taken remotely on  
11 August 30th, 2024. The court reporter today is Julie  
12 Rumsey. I'm Koryn Coalson, the videographer, on behalf of  
13 First Legal Depositions, located in Los Angeles,  
14 California. This deposition is being videotaped at all  
15 times unless specified to go off the record.

16 Would all present please identify themselves,  
17 starting with our noticing attorney.

18 ATTORNEY VINCENT: Philip, you're muted.

19 ATTORNEY WANG: Sorry. I was muted.

20 This is Philip Wang of the law firm Russ, August &  
21 Kabat representing Plaintiff, Headwater Research, LLC.

22 ATTORNEY VINCENT: Robert Vincent from Gibson Dunn  
23 on behalf of the witness and the defendants.

24 THE VIDEOGRAPHER: Sorry.

25 ATTORNEY ZHANG: Yi Zhang with Hogan Lovells. I'm

1 representing Google, LLC.

2 THE VIDEOGRAPHER: Okay. Really quickly, before  
3 we go on. Mr. Turnbull, I've spotted -- spotlit you for my  
4 video. If you could leave that on and click view and click  
5 gallery if you want to see everybody. Thank you.

6 Would the court reporter please swear in our  
7 witness.

8 CERTIFIED STENOGRAPHER: Good morning. My name is  
9 Julie Rumsey, California Certified Shorthand Reporter  
10 Number 14144. The stenographic record is the official  
11 record pursuant to C.C.P. 2025.

12 Before we proceed, I will ask counsel to agree on  
13 the record that there is no objection to this deposition  
14 officer administering a binding oath to a witness not  
15 appearing personally before me, located in Vancouver,  
16 British Columbia.

17 ATTORNEY VINCENT: No objection from Plaintiff  
18 Headwater.

19 ATTORNEY WANG: No objection from Defendants.

20 ---00---

21 DR. DONALD TURNBULL,  
22 called as a witness herein, having been  
23 administered an oath remotely in accordance with C.C.P.  
24 Section 2096, was examined and testified as follows:

25 ---00---

1 EXAMINATION

2 BY ATTORNEY WANG:

3 Q. Good morning, Dr. Turnbull.

4 A. Hi, there.

5 Q. We have met before. Correct?

6 A. I think -- yes.

7 Q. I'm getting a feeling of deja vu. It was not too

8 long ago where we had another deposition, correct?

9 A. I don't remember how long ago, but, yes, that  
10 seems familiar.

11 Q. So as I mentioned before, I represent the  
12 plaintiff, Headwater Research, LLC, in these cases. And I  
13 will just note for the record that these are cases in the  
14 Eastern District of Texas with the numbers 2:23-CV-00379  
15 and -352, with -- for the same numbers.

16 Does that sound right to you?

17 A. That -- that probably is correct. Yes.

18 Q. Do you understand that you are under oath today?

19 A. Oh, yes.

20 Q. How many times have you testified under oath  
21 before?

22 A. Oh, gosh. I would think close to 50 times,  
23 whether it's depositions or trial or in-court appearances.

24 Q. Do you understand that, even though we're on Zoom  
25 today, that the testimony you give under oath here is

1 subject to the same penalty of perjury as if you were  
2 testing -- testifying in a court of law?

3 A. Oh, sure. Yes.

4 Q. I'm going to assume that you understand the  
5 questions I ask you unless you tell me that you don't  
6 understand them.

7 Is that fair?

8 A. That is fair.

9 Q. And if anything is unclear, you will need to ask  
10 me to clarify.

11 A. Excellent.

12 Q. Is there anything that would prevent you from  
13 thinking clearly and testifying truthfully today?

14 A. No.

15 Q. If at any point you need to take a break during  
16 your deposition, just let me know. I only ask that we  
17 don't take a break while a question is pending.

18 A. Okay. Thank you.

19 Q. And we'll try to take a break every hour or so,  
20 but if you ever need one, just let me know.

21 A. Okay. Thank you.

22 Q. So are you aware that you are here to testify  
23 regarding a claim construction declaration you submitted in  
24 this case?

25 A. Yes.

1 Q. Are you aware that you submitted two declarations?

2 A. So far, yes.

3 Q. Are you planning to submit more?

4 A. If there's a need for it, I would be able to.

5 Q. And so one declaration was on behalf of T-Mobile  
6 or the T-Mobile defendants; is that correct?

7 A. Yes.

8 Q. All right. And another declaration was on behalf  
9 of Verizon. Does that sound correct?

10 A. Yes.

11 Q. And the T-Mobile declaration was submitted  
12 earlier, correct?

13 A. That's right. A couple weeks prior to the Verizon  
14 declaration.

15 Q. We will look at it shortly, but I just want to  
16 establish some background information.

17 The T-Mobile declaration is dated August 9th,  
18 2024. Does that sound right?

19 A. That does sound right.

20 Q. And the Verizon declaration -- I believe you said  
21 it was later, and the date I have for that is August 24th,  
22 2024. Does that --

23 A. That does sound right. Yes.

24 Q. Okay.

25 Are these two declarations the same in substance?

1 A. Yes. I think there is very minor differences  
2 between them.

3 Q. Are you aware of any substantive differences  
4 between them, apart from the case caption and so forth?

5 A. I think the Verizon declaration in two paragraphs  
6 has one sentence omitted, and it's about the file history  
7 of the patents.

8 Q. Okay. Apart from that, are you aware of any other  
9 differences?

10 A. No. Nothing sitting here right now.

11 Q. And when I say "differences," I mean substantive  
12 or in your opinions, you know. I'm not talking about the  
13 case caption, that sort...

14 A. Sure. No. No differences in my opinions.

15 Q. So your recollection is that the Verizon  
16 declaration two paragraphs says one sentence omitted and  
17 it's about the file history of the patents, correct?

18 A. I think both times. Yes.

19 Q. And is there any material that was added?

20 A. Nothing that comes to mind.

21 Q. The sentences that were omitted, why were they  
22 omitted?

23 (Clarification by the certified stenographer.)

24 ATTORNEY VINCENT: Object to form. To the extent  
25 there is -- the discussions you've had were -- would reveal

1 any attorney-client communications, I'd instruct you not to  
2 answer.

3 THE WITNESS: They were just omitted in editing.

4 BY ATTORNEY WANG:

5 Q. By you?

6 A. Yes.

7 Q. Did you discuss the removal with your counsel?

8 ATTORNEY VINCENT: Again, I want to caution the  
9 witness not to disclose the contents of any discussions  
10 that he may have had, the substance of any discussions that  
11 they had with counsel.

12 THE WITNESS: Yeah. I'll take counsel's advice  
13 regarding that question.

14 BY ATTORNEY WANG:

15 Q. So I think my question was, did you discuss the  
16 removal with your counsel, calling for a yes or no.

17 ATTORNEY VINCENT: Again -- sorry. Go ahead.

18 Finish.

19 ATTORNEY WANG: And, Counsel, I would encourage  
20 you to limit speaking objections, and be clear whether  
21 you're instructing the witness not to answer or not. And,  
22 you know, if that's what you're doing, please make that  
23 clear.

24 ATTORNEY VINCENT: I am being clear, and I'm not  
25 making speaking objections. So are you finished with your

1 question?

2 ATTORNEY WANG: Yes.

3 ATTORNEY VINCENT: Okay. I'm going to object and  
4 instruct the witness not to answer to the extent the  
5 response would disclose substantive conversations that the  
6 witness had with counsel.

7 BY ATTORNEY WANG:

8 Q. Okay. Without asking you to disclose the  
9 substance of conversations, Dr. Turnbull, are you able to  
10 answer yes or no to my question, which is, did you discuss  
11 the removal of the sentences that you referred to with your  
12 counsel?

13 A. I won't answer that at counsel's advice.

14 Q. So you're following your counsel's instruction on  
15 that?

16 A. That's right.

17 Q. Okay.

18 Since the substance of your two declarations are  
19 substantially the same or the same, do you agree with me on  
20 that?

21 A. Yes.

22 Q. So if we talk about one declaration, will you  
23 understand your testimony to also apply to the other  
24 declaration?

25 A. I'll agree to that. Yes.

1 Q. And so I want to first ask you about the first  
2 declaration that you submitted on behalf of T-Mobile on  
3 August 8th, 2024. Are you with me?

4 A. August 9th?

5 Q. Excuse me. August 9th, 2024?

6 A. Sure.

7 Q. Who wrote that declaration?

8 ATTORNEY VINCENT: Object to form.

9 THE WITNESS: I collaborated with counsel. I  
10 certainly didn't type every single character. There were  
11 some things that got pasted in. A very substantial portion  
12 of it, I did type. I edited. But regardless of who typed  
13 every character, it does represent, you know, my thoughts  
14 and opinions.

15 BY ATTORNEY WANG:

16 Q. You said that some things got pasted in. What got  
17 pasted in?

18 A. Oh, like quotes from the patent or the figures,  
19 for example, things like that.

20 Q. That would be something that you rely on counsel  
21 for, to provide?

22 A. It could have been that they pasted some in. It  
23 could have been that I did. I just don't recall the  
24 editing process at that level.

25 Q. Are you aware of anything else that got pasted in,

1 or are you referring to anything else?

2 A. It's possible some of the legal boilerplate was  
3 pasted in. But, of course, I reviewed it, and if there  
4 were any questions about it, I edited it to be either more  
5 readable or more understandable to at least me since it  
6 represents my opinions and the basis that my opinions come  
7 from.

8 Q. So the legal standard section of your report is  
9 the basis where your opinions come from?

10 A. It would be one part, but that's why it's in the  
11 report.

12 ATTORNEY VINCENT: Object to form.

13 BY ATTORNEY WANG:

14 Q. So when you offer claim construction opinions in a  
15 case and you've -- strike that.

16 You've been an expert in dozens of patent cases,  
17 correct?

18 A. Yes.

19 Q. And you have some understanding of legal standards  
20 of patent law or claim construction based on your work from  
21 those cases, correct?

22 A. Yes. I suspect I've added to it over time, and,  
23 of course, I guess the laws underlying the rules have  
24 changed over time as well.

25 Q. So when you offer opinions like in a declaration,

1 do you rely on your understanding of the law formed from  
2 different cases, or do you just rely on what's in your  
3 report or stated in your report?

4 ATTORNEY VINCENT: Object to form.

5 THE WITNESS: That's a good question. It's  
6 probably my cumulative experience but also acknowledging  
7 that there may be precedence that change, or based on the  
8 breadth or the depth of what I'm asked to analyze, I may  
9 put more thought into some parts than others. But,  
10 generally, you know, based on my -- my skills and  
11 experience and, like you suggested, my prior work as well.

12 BY ATTORNEY WANG:

13 Q. And I'm specifically asking about the legal  
14 standards that are applicable to your opinions such as  
15 about claim construction or other aspects of patent law.

16 And you would give the same answer?

17 ATTORNEY VINCENT: Object to form.

18 THE WITNESS: Generally, yes.

19 BY ATTORNEY WANG:

20 Q. So do you have like the same legal standards that  
21 you rely on in each case, or do you get them from counsel  
22 for particular cases?

23 ATTORNEY VINCENT: Object to form.

24 THE WITNESS: You know, it's hard to say case by  
25 case. I certainly don't have a perfect memory of it. But,

1 nonetheless, I'll certainly review what's relevant and  
2 include it in the specific report at the time and act from  
3 those principles. But, again, I also have, you know, my  
4 own skills and experience. Not only as a computer  
5 scientist but also just someone that, you know, is well  
6 read enough to be able to understand language and think  
7 about what the issues are and how clearly something is  
8 represented or how well written it is so that it is  
9 potentially clearly understood.

10 BY ATTORNEY WANG:

11 Q. So when you're providing technical opinions in a  
12 case or in a declaration, do you go back and refer to the  
13 legal standards that are set forth at the beginning of your  
14 declaration to inform your technical opinions?

15 A. Oh, yes. Sometimes I do.

16 Q. And do you rely on any legal standards outside of  
17 what's in your report to inform your technical opinions?

18 A. I'm not sure in this report. I don't remember the  
19 breadth of what standards I had documented. But I would  
20 say it would be what's documented in the report. But,  
21 again, also my skills and experience doing that over time.

22 Q. For your first declaration on August 9th, how many  
23 hours did you spend on that report?

24 A. Huh. I really don't recall off the top of my  
25 head. There was a lot to read and review. Maybe 40 hours,

1 but I could be off by that much as well. I just don't  
2 recall.

3 Q. Do you recall how many days? Was it 40 hours over  
4 two grueling days, or was it many days?

5 A. It was over many days. Often in the afternoon. I  
6 think that's my habit for many things.

7 Q. Would you say it would be a week or two weeks?  
8 Can you give me a sense of that?

9 A. I would say it would extend over a two-week period  
10 because I might set it aside and read, think about it, go  
11 back and edit it. So forth.

12 Q. When were you retained to serve as an expert in  
13 the T-Mobile case?

14 A. I should have known you would ask that, but I just  
15 don't remember.

16 Q. Do you remember relative to when you started  
17 working on the declaration?

18 A. Well, certainly it would be before I started  
19 working on the declaration, of course. But beyond that, I  
20 don't recall. Certainly in the last several months.

21 Q. And you were retained -- retained by or through  
22 the law firm of Gibson Dunn; is that correct?

23 A. That's right.

24 Q. And which counsel did you work with on your  
25 report?

1 A. I don't recall the breadth of the people that I  
2 worked with. I would think primarily it's Mr. Vincent here  
3 that's with us today.

4 Q. And for the second declaration that you submitted  
5 for the Verizon case, we talked about how your opinions are  
6 the same in that report, right?

7 A. Yes.

8 Q. And Verizon is also represented by Gibson Dunn,  
9 correct?

10 A. My understanding, yes.

11 Q. And did you work with Mr. Vincent on that second  
12 report as well?

13 A. He was involved. Yes.

14 Q. Were different people involved in the Verizon case  
15 with the Verizon report?

16 A. I'm not sure.

17 Q. And how many hours did you spend preparing the  
18 Verizon report?

19 A. Fewer hours. It was kind of nice to have the  
20 pause between the reports to go back and review it and read  
21 it again. But certainly significantly fewer hours.

22 Q. Because your opinions were the same, and you had  
23 already done the net work on the --

24 A. That's right.

25 Q. Okay. I'll go back, and I'll be asking you about

1 the T-Mobile report, but as we discussed, again, because  
2 they're the same, you understand, to the extent applicable,  
3 that they apply to both reports.

4 Does your report or declaration contain a complete  
5 statement of your opinions in these cases?

6 A. Yes.

7 Q. Sitting here, do you have any corrections to the  
8 two reports?

9 A. There might be one place -- if we stumble cross it  
10 or it becomes relevant, I'll probably see it -- where I  
11 wished just to be parallel in the sentence structure. I  
12 had put a word in quotes. What that word is, I don't  
13 remember off the top of my head. If we stumble across it,  
14 I'll note it for you. But I think that's about it.

15 Again, having the chance to go back and look at  
16 the report again before I submitted the report on behalf of  
17 Verizon, I didn't see any editing errors that I made.

18 Again, we may still stumble across some today. And if we  
19 do, I'll let you know.

20 Q. Okay. And what you mentioned was just at one  
21 point where you had put a word in quotes?

22 A. No, I should have -- I should have put a word in  
23 quotes just to make the sentence structure parallel. It's  
24 probably a very fine point. If we stumble across it, I'll  
25 point it out.

1 Q. And was that something -- a correction you would  
2 make to both reports, or it was made in one and not the  
3 other?

4 A. I think it would be something that, if I wanted to  
5 fix, I would fix it for both.

6 Q. Got it.

7 And apart from that, you did not see any other  
8 corrections?

9 A. Yeah. Sitting here today, nothing else comes to  
10 mind.

11 Q. Do your reports contain a complete statement of  
12 your opinions that you intend to offer in this case?

13 ATTORNEY VINCENT: Object to form.

14 THE WITNESS: I would say they contain my opinions  
15 so far related to the case.

16 BY ATTORNEY WANG:

17 Q. Do they contain your opinions that you intend to  
18 offer for claim construction proceedings in this case?

19 A. They do.

20 Q. Do they contain a complete statement of your  
21 opinions that you intend to offer for claim construction  
22 proceedings in this case?

23 A. I would say that they're complete to date. I  
24 don't know if someone would ask me to do any additional  
25 work or not.

1 Q. Do you currently plan to?

2 A. Not unless someone asks me to.

3 Q. What did you do to prepare for today's deposition?

4 A. Reviewed a lot of the documents, the patents, the  
5 file histories, my reports, and had review session with  
6 counsel, including Mr. Vincent, who is with us here today.

7 Q. Dr. Turnbull, I believe, in our last deposition,  
8 we entered into a stipulation, and I want to propose it  
9 again. I believe we agreed that whenever one of us said  
10 "report," it would also mean declaration, and if one of us  
11 said "declaration," it would also mean report.

12 Can we agree to that as well?

13 A. I will agree to that. I often use them  
14 interchangeably. It's probably not good to not be  
15 consistent, but I think it's an error we both seem to be  
16 making.

17 Q. Thank you. I think we've both been toggling back  
18 and forth, and both of us have been calling it both things.

19 Thank you, Dr. Turnbull.

20 So you mentioned that you reviewed a lot of  
21 documents, the patents, the file histories, your reports or  
22 declarations, and had a review session with counsel.

23 Correct?

24 A. Yes.

25 Q. When you say you reviewed the patents, are you

1 referring to the '541 and the '613 patents?

2 A. Yes. At least those.

3 Q. What other patents?

4 A. I think there were some other Headwater patents,  
5 and I suspect it's possible that I opened them up at some  
6 point just in reviewing.

7 Q. When you say that "there were some other Headwater  
8 patents," do you mean patents asserted in these cases?

9 A. Or at least were asserted in these cases.

10 Q. What do you mean, "or at least were asserted in  
11 these cases"?

12 A. I don't remember if -- you know, I don't really  
13 check the docket to see if all of the patents in the  
14 original complaint are still at play, but they're just all  
15 stored in a folder on my -- on my computer together.

16 Q. Did you review any Headwater patents that are not  
17 asserted in these cases?

18 A. I don't think so.

19 Q. But you have -- you have in the past, correct?

20 A. Yes.

21 Q. Did you look at the -- the other Headwater patents  
22 that you may have opined on before in preparing for your  
23 declaration?

24 A. I don't think so.

25 Q. And you said the file histories. Do you recall

1 which file histories you reviewed?

2 A. Oh, probably just for the '541 and the '613

3 patents.

4 Q. And then, in addition to the patents and file

5 histories, you said that you reviewed a lot of documents.

6 Can you clarify what you meant by "documents"?

7 A. Part of what I meant was what we just discussed,  
8 the patents and my report and so forth. That might be the  
9 breadth of it, in fact.

10 Q. Can you recall any other documents apart from the  
11 patents and the file histories and your reports?

12 A. Not off the top of my head. No.

13 Q. And you said you also met with counsel. Was that  
14 via Zoom?

15 A. Yes.

16 Q. And how many meetings did you have with counsel?

17 A. Just one.

18 Q. And about how long was that meeting?

19 A. Not particularly long. Maybe a couple hours.

20 Q. And you said that Mr. Vincent was part of the  
21 meeting?

22 A. That's right.

23 Q. Do you -- do you recall anyone else?

24 A. Not to get their names perfectly correct, I don't.

25 ATTORNEY WANG: I would like to go ahead and

1 introduce your two reports as exhibits, and what I'll do  
2 is -- and I think we did this before, Dr. Turnbull. I'll  
3 send them in the Zoom.

4 THE WITNESS: Okay.

5 ATTORNEY WANG: And so -- if you -- if you get the  
6 chance, if you could download them. And when they're  
7 ready, let me know.

8 (Clarification by the certified stenographer.)

9 ATTORNEY WANG: Yes. I will be -- Exhibit 1 and  
10 Exhibit 2.

11 (Exhibit 1 was presented and subsequently marked  
12 for identification.)

13 (Exhibit 2 was presented and subsequently marked  
14 for identification.)

15 THE WITNESS: Okay. I downloaded both of them,  
16 and they both seem to appear and look just fine.

17 BY ATTORNEY WANG:

18 Q. Could you open the file that begins with  
19 Exhibit 1.

20 A. I've got it open.

21 Q. Okay. Thank you.

22 So I will introduce as Exhibit 1 a document  
23 entitled Declaration of Dr. Donald Turnbull, and on the  
24 first page has the caption for the T-Mobile case with the  
25 case numbers 223-CV-00379-JRG-RSP.

1 Do you -- do you see that, Dr. Turnbull?

2 A. I do. I see that on the first page of Exhibit 1.

3 Q. And this document is 30 pages, correct?

4 A. It looks like it. Yes.

5 Q. Does this appear to be a true and correct copy of  
6 the declaration that you submitted in the case on behalf of  
7 T-Mobile?

8 A. It does. It does. I scrolled down, and I see my  
9 signature on page 30 and the date, August the 9th, as we  
10 discussed previously.

11 Q. Could you open Exhibit 2, and turn to the first  
12 page of that.

13 A. Okay. I've got it open. I'm with you.

14 Q. And so I will introduce as Exhibit 2 a document,  
15 the first page says declaration of Dr. Donald Turnbull. It  
16 has the case caption for the Verizon defendants and has the  
17 case number 223-CV-00352.

18 Do you see that?

19 A. I do. I'm with you.

20 Q. And, Dr. Turnbull, does this appear to be a true  
21 and correct copy of your second declaration that we talked  
22 about submitted in the Verizon case?

23 A. It looks like it is, and I see that there's  
24 several pages attached as Exhibit A, which looks like a  
25 copy of my current CV as well in that PDF file.

1 Q. So if you turn to -- so this document, Exhibit 2,  
2 it's 41 pages, correct?  
3 A. That's right.  
4 Q. And if you turn to page 30 of the document, it has  
5 your signature on that, right?  
6 A. That's right.  
7 Q. And it says, this declaration was executed on  
8 this 24th day of August 2024.  
9 A. That's right.  
10 Q. And then this document also has an Exhibit A  
11 appended to it. Does this Exhibit A at the end of the  
12 document appear to be a true and correct copy of your CV?  
13 A. It does.  
14 Q. Can you please turn to page 9 of your CV, 9 of 10.  
15 A. Okay. So that'd be page 40 of the PDF?  
16 Q. Yes.  
17 A. That's Exhibit 2?  
18 Q. Yes.  
19 Do you see on this page it identifies cases  
20 involving reports, declarations, in-court appearances,  
21 testimony, or depositions? Do you see that?  
22 A. I do see that.  
23 Q. Are these all of the cases that you've done that  
24 work in or for a certain period of time?  
25 A. I think they represent all of them unless I've

1 just forgotten to include one. That should be a pretty  
2 complete list.

3 Q. Okay. So the first case, you were retained by the  
4 party Endeca Technologies, Inc.

5 Do you see that?

6 A. I do.

7 Q. Because that party name is bolded, right? That  
8 means you were retained by them?

9 A. That's right. That's what I formatted everything  
10 in this section to do.

11 Q. Do you -- do you recall when that was or when you  
12 worked on that case?

13 A. I would guess 2005 or 2006 or maybe starting in  
14 2005 going to 2006.

15 Q. Okay. Let's go to the bottom of the list.

16 Number -- item 36. Do you see that?

17 A. Okay. So on the next page, the last page of  
18 the --

19 Q. Yes. On page 10.

20 A. -- Exhibit 2. Okay. I'm with you.

21 Q. And these cases are in chronological order, right?  
22 The oldest first and then the most recent last, right?

23 A. I would say mostly. There may be some that were  
24 maybe ongoing at the same time, and I -- they might be one  
25 ahead of the other based on either when they finished or

1 just when I added them. But they're roughly chronological.

2 Q. And could you take a look at the last item on the  
3 list? Do you see that? It says Headwater Research, LLC,  
4 versus Samsung Electronics --

5 A. I do see that.

6 Q. -- Company LTD and Samsung Electronics America,  
7 Inc.?

8 Do you see that?

9 A. Yes.

10 Q. Since it's the most recent case or one of the most  
11 recent cases, do you have a recollection of that case?

12 A. Not really, sitting here today.

13 Q. Do you recall being deposed in that case?

14 A. That seems familiar. Yes.

15 Q. Do you recall being deposed by yours truly in that  
16 case?

17 A. That's what rings a bell. Yes.

18 Q. Okay. I'm just trying to reorient you.

19 And in that case, you -- do you -- do you remember  
20 what your opinions were about?

21 A. I think that was also claim construction.

22 Q. And you submitted a declaration in that case?

23 A. That's right.

24 Q. And you were -- you were also deposed?

25 A. That's right. As you mentioned.

1 Q. Did you -- did you review your deposition  
2 transcript in that case?

3 A. I did at the time, but I'm not sure I've looked at  
4 it since then. I might have, but I don't recall.

5 Q. You mean you reviewed it sometime shortly after  
6 the deposition?

7 A. That -- that seems right. Yes.

8 Q. Did you make any corrections to your testimony?

9 A. I don't recall.

10 Q. Do you stand by the testimony you gave in that  
11 case in that deposition?

12 A. Yes. By my recollection, yes.

13 Q. Do you recall if you offered in- --

14 (Clarification by the certified stenographer.)

15 BY ATTORNEY WANG:

16 Q. -- indefiniteness opinions in that case?

17 A. I think I did.

18 Q. Do you know if the court issued a claim  
19 construction order in that case?

20 A. I don't know if that's happened yet.

21 Q. And so have you reviewed any claim construction  
22 order in that case?

23 A. I don't recall.

24 Q. You don't recall one way or the other, or you  
25 don't recall reviewing it?

1 A. I don't recall one way or the other sitting here  
2 right now.

3 Q. Have you reviewed any claim construction orders in  
4 other Headwater cases?

5 A. I did look at one other one. I just don't  
6 remember if it's related to what we're just discussing from  
7 my CV or not.

8 Q. The one other one, do you know if it was this  
9 case?

10 (Clarification by the certified stenographer.)

11 BY ATTORNEY WANG:

12 Q. Let me reask.

13 The one other claim construction order that you  
14 did look at, do you know if it was this case in item 36?

15 A. I don't remember the number that was on the first  
16 page of it.

17 Q. Do you remember anything about that order, like  
18 what it was about?

19 A. It was about claim construction and what the judge  
20 decided on.

21 Q. And do you remember what issues the court decided  
22 or what terms?

23 A. Not specifically. I would have to look at it to  
24 refresh my memory. I think it was by Judge Payne. That  
25 rings a bell.

1 Q. Unfortunately, that does not narrow it down.

2 Let me ask you the following: Do you remember  
3 when you reviewed that order? Was it in preparing for this  
4 deposition or in preparing your reports?

5 A. I would say the former. It's something I looked  
6 at relatively recently.

7 Q. In preparing for this deposition?

8 A. Yes.

9 Q. And that was the first time that you had seen it?

10 A. As far as I can remember, yes.

11 Q. Dr. Turnbull, since we have Exhibits 1 and 2 open,  
12 would you be able to point me to the -- to the sentence  
13 that was omitted that you testified about this morning?

14 A. I can take a look if you'll give me a minute. I  
15 think I said there were two sentences that were omitted if  
16 I recall.

17 I'm still looking here, if you'll bear with me.

18 I don't see it now. I don't remember exactly  
19 where it was at. Again, if we -- if we talk about  
20 something and I see it, I'll point it out to you.

21 Q. And was your recollection that it would have been  
22 in the summary of the prosecution history?

23 A. That was my recollection, and I don't see it. So  
24 I don't know if I edited it out in the first place or not.  
25 I just can't find it here. I know it's not the largest

1 declaration in the world, but I just don't see it.

2 Q. Okay. Thank you, Dr. Turnbull.

3 Let's talk about Exhibit 1, and I think you can  
4 close Exhibit 2 if it's taking up space since we agree that  
5 the declarations were substantially the same.

6 A. Okay. Thank you.

7 Q. Can you turn to paragraph 20 of your report in  
8 Exhibit 1.

9 A. I'm with you. It looks like it's page 7.

10 Q. Right.

11 And so, paragraph 20, you list that the materials  
12 that you considered in forming your opinions in the  
13 declaration, correct?

14 A. That's right.

15 Q. And this list does not have any claim construction  
16 orders, correct?

17 A. No. That's not listed here.

18 Q. And so, if you had reviewed certain claim  
19 construction orders before submitting the report, you would  
20 have listed it in this paragraph.

21 A. I would hope that I would. Yes.

22 Q. And that supports what you said before, if you did  
23 look at a claim construction order, it would have been  
24 after --

25 A. Exactly right.

1 Q. -- this report?

2 And was that also after submitting your report in  
3 the Verizon case?

4 A. I think so. Yes.

5 Q. Okay. At the time that you submitted this  
6 T-Mobile report, were there any other documents that you  
7 relied on that are not on this list?

8 A. Nothing comes to mind. You know, of course, in,  
9 you know, the history of me being a computer scientist, I'm  
10 sure I review documents all the time, programming  
11 documents, to just be more educated about my field. But  
12 nothing that fits into these types of documents.

13 Q. Okay. And then, sitting here today, you mentioned  
14 a claim construction order in a -- in a Headwater case that  
15 you did look at. Are there any other documents that you  
16 reviewed or looked at that are not in this list?

17 A. Nothing else comes to mind right now.

18 Q. Okay. I'm turning back to paragraph 20. Do you  
19 see how you list the four patents and their file histories?

20 A. That's right. I see that.

21 Q. Did you review the references cited in the file  
22 histories?

23 A. I might have, now that you say that. Or at least  
24 I read through the list of the references, I think. Even  
25 one of the papers that's an academic paper listed is

1 something that I read long ago. It rang a bell.

2 Q. So how did you read the file history? Did you  
3 kind of skim through it or, I mean, walk through it? Can  
4 you kind of describe that?

5 A. I think they were pretty big. I probably pulled  
6 up the first page probably for all of them and just  
7 reviewed generally what it said there. And then might have  
8 scrolled through it. There's always, you know, different  
9 formatting and things like that that may have kept my  
10 attention probably more than it should sometimes.

11 And I suspect, over time, if I went to look at it  
12 again after getting an overview, I might do some keyword  
13 searching. But also, scrolling around, I'm never convinced  
14 that all of the optical character recognition or what's  
15 inserted are perfectly matching to what we see on the PDF  
16 itself. So I might do some scrolling around to make sure I  
17 haven't missed something.

18 Or find something that's, you know, kind of  
19 interesting to me and then read, you know, above and below  
20 that section as well.

21 Q. And you said you reviewed the list of references  
22 cited for the patents?

23 A. I would say I noted them. I, you know, scrolled  
24 through it to look and see if anything popped up that rang  
25 a bell or I saw a name that I might know or something like

1 that, because often, when you're working in an area you  
2 know, there might be something that strikes you as familiar  
3 or it's like, oh, yes.

4 Q. And did you do that for each of the asserted  
5 patents?

6 A. That, I'm not sure. Being there was four of them,  
7 I don't remember if I did that four times or, you know,  
8 partially on one and then coming back to it later. I just  
9 don't recall that.

10 Q. Do you know if you did that for the '541 and  
11 the '613 patents?

12 A. I'd say the '541 for sure since it's kind of the  
13 earliest patent. It's probably the one that I looked at  
14 more just like we're kind of looking at, you know,  
15 something else here, but beyond that, I don't recall.

16 Q. And so for the '541 patent, for example, if you  
17 look at the list of references cited, it doesn't just have  
18 like the name of the patent or the number? Or did -- would  
19 it have the name of the patents?

20 A. I think sometimes it would have the number, which  
21 tells me something about maybe the approximate date of the  
22 patent, at least when it was filed. But often  
23 references -- like I said, I think there was an academic  
24 paper in there as well. I think the file history might  
25 have mentioned other references as well. And maybe those

1 stuck out as something that was interesting, and I looked  
2 at those or at least looked at what the title was about,  
3 trying to get an idea if it looked like it was something  
4 that I should go look at. But, yeah, I certainly didn't  
5 exhaustively look up the many, many, many references that  
6 are included.

7 Q. You mentioned an academic paper, and you said it  
8 was something that you read long ago.

9 A. That's right. Yeah. I remember it rang a bell.

10 Q. What paper was that?

11 A. Without looking at the patent, I don't recall  
12 specifically, but I remember it was one of the references,  
13 and it was something that I knew. I think it was related  
14 to location-based services. Maybe it was one of the papers  
15 that used that term early on.

16 Q. Location-based services?

17 A. Uh-huh.

18 Q. Which is an interest of yours? That topic?

19 A. Oh, yeah, certainly. I've been doing work related  
20 to that for a long, long time. I would say since probably  
21 the late '90s.

22 Q. Do you see, at the bottom of this list, you have  
23 defendants and plaintiffs exchange of preliminary proposed  
24 claim constructions and extrinsic evidence?

25 Do you see that?

1 A. I do.

2 Q. And did you just review the documents or the  
3 documents and whatever was cited therein?

4 A. I suspect both the claim construction and at least  
5 some of the documents that are referenced in it.

6 Q. But this list just says the document, it seems.

7 ATTORNEY VINCENT: Object to form.

8 THE WITNESS: Yeah. I'm not sure what "and  
9 extrinsic evidence" means in terms -- does that mean other  
10 documents or not.

11 BY ATTORNEY WANG:

12 Q. Do you see that you have -- you have four IPR  
13 petitions on this list?

14 A. I do.

15 Q. What do you mean by "accompanying papers"?

16 A. Probably the references that were used in the  
17 IPRs.

18 Q. Would it include the exhibits to the IPR petition?

19 A. I think we're saying the same thing. Yes. Some  
20 of the documents like prior art references. There could be  
21 other documents as well. That's probably -- I remember the  
22 references probably more than some of the legal documents.

23 Q. Have you served as an IPR expert before in IPR  
24 proceedings?

25 A. Yes.

1 Q. Many times?

2 A. Yes.

3 Q. For both petitioners and patent owners?

4 A. Yes.

5 Q. And you know that an IPR petition almost always  
6 includes an expert declaration?

7 A. I guess all the ones I worked on have.

8 Q. And so did you review the expert declarations that  
9 were accompanying these petitions?

10 A. If I've got it listed here, that must have been  
11 something I looked at, but I really don't recall, sitting  
12 here right now.

13 Q. Okay. And would it -- your review of the  
14 accompanying papers, it would include the prior art  
15 references of record in those IPRs?

16 A. It certainly could. I don't remember how many  
17 there were or, you know, specifically looking at them, but  
18 if I was provided them and I've got them listed here, I  
19 suspect I at least had them to look at.

20 Q. Okay. And would it include the prior art  
21 references that are cited as background references for the  
22 IPR?

23 A. I'm going to say yes, but I'm not sure even what  
24 you mean by "background." Would there be two kinds of  
25 references?

1 Q. Yeah. Let -- let -- no, let me clarify my  
2 question.

3 So you know in an IPR there will be the prior art  
4 that's relied upon, right? If there's like three grounds,  
5 there will be the prior art, either its anticipation ground  
6 or part of an obviousness combination. The ones that the  
7 opinion is based on.

8 But apart from that, sometimes there can be  
9 additional references or additional prior art discussed,  
10 relied on, not as -- not under an IPR ground but as  
11 background or for other points.

12 A. Okay.

13 Q. You're nodding your head, so I think you  
14 understand.

15 My question is, then, did you limit your review to  
16 only, you know, the prior art of record for the grounds  
17 or -- or it went beyond -- went beyond that?

18 A. I don't remember. I suspect, if there was  
19 something that I was provided or that caught my interest, I  
20 would have gone to find it if it were another piece of  
21 background. I just don't recall from the breadth of the  
22 documents there which were background and which were not.

23 Q. Did you rely on the IPR petitions or the  
24 accompanying papers in the substance of your report?

25 A. I don't think I reference them anyplace else in my

1 report. No.

2 Q. Why not?

3 A. Not sure. Just didn't.

4 Q. Did you feel like it was not relevant?

5 ATTORNEY VINCENT: Object to form.

6 THE WITNESS: I didn't really think about it in

7 that term. Yeah. I just don't remember.

8 ATTORNEY WANG: Let's go off the record.

9 (Clarification by the certified stenographer.)

10 ATTORNEY VINCENT: Yeah.

11 THE VIDEOGRAPHER: Wait.

12 The time is now 10:01 a.m. We're going off the  
13 video record.

14 (Recess taken.)

15 THE VIDEOGRAPHER: The time is now 10:11 a.m.

16 We're back on the video record.

17 BY ATTORNEY WANG:

18 Q. Welcome back, Dr. Turnbull.

19 A. Thank you.

20 Q. Did you have any discussions with your counsel  
21 during the break?

22 ATTORNEY VINCENT: You can answer that question  
23 yes or no.

24 THE WITNESS: Yes.

25 ////

1 BY ATTORNEY WANG:

2 Q. Did you discuss the substance of your testimony?

3 ATTORNEY VINCENT: I'm going to instruct the  
4 witness not to answer the question if it involves  
5 discussions of the substance of what was discussed with  
6 counsel during the break.

7 BY ATTORNEY WANG:

8 Q. So my question was a yes or a no, did you discuss  
9 the substance of your testimony --

10 ATTORNEY VINCENT: I'm going to -- sorry.

11 BY ATTORNEY WANG:

12 Q. Yeah.

13 -- without disclosing what the substance was, can  
14 you answer that yes or no?

15 ATTORNEY VINCENT: I'm going to instruct the  
16 witness not to answer.

17 THE WITNESS: Yeah. I'll take counsel's advice  
18 and not answer that.

19 BY ATTORNEY WANG:

20 Q. You'll follow counsel's instruction on that?

21 A. (Nods head.)

22 Q. Dr. Turnbull, can you turn to paragraph 21 of your  
23 report.

24 A. I'm with you on page 8.

25 Q. Yes.

1 And do you see the heading for that? It says

2 legal principles?

3 A. I do.

4 Q. And those are legal principles concerning claim  
5 construction, correct?

6 A. Yes. Generally. Yes.

7 Q. We may have discussed this before, but were these  
8 legal principles provided from -- by counsel?

9 A. I think, for the most part, they were. I  
10 certainly read through them, analyzed them. I don't recall  
11 or not whether I edited them.

12 Q. And are these the legal principles you relied on  
13 to form your technical opinions in this case?

14 A. I would say, for the most part, yes.

15 Q. What do you mean, "for the most part"?

16 A. Well, it's discussing the legal principles about  
17 construing patent claims. So I guess I have some  
18 understanding, even though I'm not an attorney, about just  
19 patents in general and the form of them and what they  
20 should represent. So that certainly comes into play as  
21 well when I'm trying to build an understanding of the  
22 patent claims for construction.

23 Q. What about the legal standards for claim  
24 construction? The legal standards I'm speaking of. Did  
25 you rely on what's stated here or some other understanding?

1 ATTORNEY VINCENT: Object to form.

2 THE WITNESS: I would say I relied on what's  
3 stated here in my report.

4 BY ATTORNEY WANG:

5 Q. So if it's not stated in here, you did not rely on  
6 that as a legal principle?

7 ATTORNEY VINCENT: Object to form.

8 THE WITNESS: I guess that's possible. Without  
9 looking at this and thinking about the complexity these  
10 represent, I would say that's generally -- generally  
11 accurate.

12 BY ATTORNEY WANG:

13 Q. Okay. Can you turn to paragraph 23 of your  
14 report.

15 A. Okay. That's on the next page, page 9.

16 Q. Right. So on this page, you discuss an inventor  
17 acting as his or her own lexicographer. Do you see that?

18 A. I do.

19 Q. You say (as read):

20 I also understand an inventor can use terms in  
21 a manner other than in their plain and ordinary  
22 meaning by clearly --

23 (Clarification by the certified stenographer.)

24 BY ATTORNEY WANG:

25 Q. I'm sorry. Let me start over, and I'll read it

1 slower.

2 In paragraph 23 you say (read):

3 I also understand that an inventor can use  
4 terms in a manner other than in their plain and  
5 ordinary meaning by clearly, deliberately, and  
6 precisely defining those terms in the patent  
7 specification or in the file history.

8 Do you see that?

9 A. Yes.

10 Q. And then you say (as read):

11 This is referred to as acting as a lexicographer.

12 Do you see that?

13 A. Yes.

14 Q. Are you familiar with the term "disclaimer"?

15 A. I certainly have heard it before.

16 Q. What's your understanding of what "disclaimer" is?

17 A. I don't recall the breadth of what it would mean  
18 certainly applied to this.

19 Q. Is the concept of disclaimer discussed in your  
20 report?

21 A. I don't recall that that's in there.

22 Q. And you don't offer any opinions regarding  
23 disclaimer?

24 A. Off the top of my head, no. I don't recall doing  
25 that.

1 Q. In paragraph 23, you do discuss the concept of  
2 lexicography, correct?

3 A. That's right.

4 Q. Do you understand disclaimer and lexicography to  
5 be related or the same thing or similar?

6 ATTORNEY VINCENT: Object to form.

7 THE WITNESS: I think my memory is that there is a  
8 similarity, yes.

9 BY ATTORNEY WANG:

10 Q. All right. Do you offer any opinions regarding  
11 lexicography in your report?

12 A. No.

13 Q. Let's look at the terms. If I can turn your  
14 attention to paragraph 50 of your report.

15 A. Five-zero?

16 Q. Yeah. 50.

17 A. Okay. On page 18?

18 Q. On page 18. Yeah.

19 And I want you to look at the first heading. It  
20 says (as read):

21 A, one or more perspective -- dot, dot, dot --  
22 communications over wireless network ('541 patent,  
23 claim 1).

24 Do you see that?

25 A. I do.

1 Q. Do you offer any opinions about lexicography or  
2 disclaimer for this term?

3 A. Nothing that I see here. No.

4 Q. Can you please turn to paragraph 64 of your  
5 report.

6 A. On page 22. I'm with you.

7 Q. Yes. Yes.

8 And here, do you see the heading B?

9 A. I do.

10 Q. And do you see that there is three claim terms in  
11 that heading?

12 A. Yes.

13 Q. The first claim term is "backward activity" for  
14 the '541 patent, claim 1, correct?

15 A. Background activity, yes.

16 Q. Background activity. Okay.

17 For each of these three terms, or any of these  
18 three terms, do you offer any opinions regarding  
19 lexicography or disclaimer?

20 A. Nothing that I see here. No.

21 Q. Okay. Can we turn back to paragraph 23 of your  
22 report in the legal standards section.

23 A. Okay. I'm with you. We're back on page 9.

24 Q. Okay. In paragraph 25, you state here --

25 (Clarification by the certified stenographer.)

1 BY ATTORNEY WANG:

2 Q. In paragraph 25, you state your legal  
3 understanding of "indefiniteness," correct?

4 A. Yes.

5 Q. And is that the definition that you applied in  
6 offering your technical opinions in this declaration?

7 A. Yes.

8 Q. And did you obtain this understanding from  
9 counsel?

10 A. I suspect I had this understanding prior to this  
11 project because I've done this work before. I think  
12 paragraph 25 is a good succinct reminder of what I would  
13 base my technical opinions on.

14 Q. Okay. And so can you answer my question, which  
15 was: Did you obtain this understanding from counsel?

16 A. I guess I'm not sure what you mean by the  
17 question.

18 Q. Did you get this language from counsel to put in  
19 the report?

20 A. I think this was part of the boilerplate, but,  
21 again, I certainly read through it. I've done work like  
22 this before. And, again, I don't recall if I edited this.  
23 It certainly seems much more readable than a lot of legal  
24 standards that might imply that it was edited by -- in some  
25 way to be more readable, but I don't recall specifically.

1 Q. And if an aspect of the legal standard of  
2 indefiniteness is not in this paragraph, is it fair to say  
3 that you would not have applied it?

4 ATTORNEY VINCENT: Object to form.

5 THE WITNESS: I don't know if that's a matter of  
6 degree of what is missing from this paragraph that you may  
7 be suggesting or otherwise. I feel like this represents  
8 the general concept and my understanding of it and what I  
9 analyzed or thought about to do that. So I'm not sure what  
10 else it might include. I guess you would have to suggest  
11 that to let me know if it doesn't fall within the scope of  
12 what's discussed in this paragraph.

13 BY ATTORNEY WANG:

14 Q. Do you understand that "breadth" is not  
15 "indefiniteness"?

16 ATTORNEY VINCENT: Object to form.

17 THE WITNESS: Breadth?

18 BY ATTORNEY WANG:

19 Q. Yes. The claim term being broad, that that does  
20 not make it indefinite.

21 A. I think it would depend on the claim term, but  
22 also breadth probably is relative depending on what that  
23 term is. Certainly from a technical standpoint.

24 Q. What do you mean, "certainly from a technical  
25 standpoint"?

1 A. Well, the language of the claim term, depending on  
2 what that language is -- some terms might be much broader  
3 than others, especially since we're talking about software  
4 where you really should be specific or precise, as I  
5 believe I discuss in this paragraph, sufficiently precise.  
6 So it might depend on the term.

7 Q. Do you agree that breadth alone does not render a  
8 term indefinite?

9 ATTORNEY VINCENT: Object to form.

10 THE WITNESS: I'm not sure. I think it would  
11 depend on the context if there was an example or if there  
12 was something I could examine to think about that.

13 BY ATTORNEY WANG:

14 Q. Do you agree that the indefiniteness requirement  
15 must take into account the inherent limitations of  
16 language, reasonable certainty in light of the subject  
17 matter, and not absolute precision as required?

18 ATTORNEY VINCENT: Object to form.

19 THE WITNESS: We're back to that word "precision."  
20 I think, as I have here, it needs to be sufficiently  
21 precise. So, again, maybe there's the context of what the  
22 claim language is trying to describe. Certainly in the  
23 eyes of myself or a person of skill.

24 BY ATTORNEY WANG:

25 Q. But would you agree with what I said?

1 ATTORNEY VINCENT: Object to form.

2 THE WITNESS: I think you'd have to read that back  
3 to me now that I've already spoken.

4 BY ATTORNEY WANG:

5 Q. Sure.

6 The definiteness requirement must take into  
7 account the inherent limitations of language.

8 ATTORNEY VINCENT: Object to form.

9 BY ATTORNEY WANG:

10 Q. Do you agree with that?

11 A. I -- I'm not really sure what that means.

12 Q. Do you understand that definiteness can be met by  
13 reasonable certainty in light of the subject matter and not  
14 absolute precision as required?

15 A. I think, just like I say here, it needs to be  
16 sufficiently precise. I'm not sure what absolute precision  
17 really means. That modifier doesn't really help me. It  
18 just should be precise or, again, like I say here,  
19 sufficiently precise. Absolute, again, might be a little  
20 relative depending on the term itself.

21 Q. All right. Do you agree that absolute precision  
22 is not required?

23 ATTORNEY VINCENT: Object to form.

24 THE WITNESS: I think it might depend. You know,  
25 if we're talking about software, precision matters. So it

1 would just depend on what we'd be looking at.

2 BY ATTORNEY WANG:

3 Q. Do you understand that indefiniteness must be

4 proven by clear and convincing evidence?

5 A. Yes. And I think that's probably where maybe  
6 we're getting tied up a little bit. Absolute precision  
7 seems to be something that would lead into clarity, and you  
8 just mentioned "clear." And so, again, I think it depends  
9 on what that is, whether it's sufficiently precise or, I  
10 think you said, absolutely precise or absolute precision.

11 Q. So in paragraph 26 you just say that, if a claim  
12 contains an element that is indefinite, then the claim is  
13 invalid.

14 Do you see that?

15 A. Yes.

16 Q. You don't say anything about indefiniteness  
17 required to be proven by clear and convincing evidence in  
18 your legal standards.

19 ATTORNEY VINCENT: Object to form.

20 THE WITNESS: That's just what I have in that  
21 paragraph 26. Yes.

22 BY ATTORNEY WANG:

23 Q. Do you have anything about clear and convincing  
24 evidence in your report?

25 ATTORNEY VINCENT: Object to form.

1 THE WITNESS: Nothing that comes to mind. No.

2 BY ATTORNEY WANG:

3 Q. Can we turn to paragraph 43 of your report.

4 A. Sure.

5 I'm with you. It's at the bottom of page 15.

6 Q. In paragraph 43, you provide a summary of the  
7 prosecution history of the '541 patent, correct?

8 A. In which paragraph?

9 Q. Starting on paragraph 43, which is under the  
10 heading of prosecution history of the '541 patent.

11 Do you see that?

12 A. Yeah. I see paragraph 43 there at the bottom of  
13 page 15.

14 Q. And so, in this subsection B, you're providing an  
15 overview or summary of the prosecution history of the '541  
16 patent?

17 A. Yes.

18 Q. Do you rely on the prosecution history of the '541  
19 patent in your claim construction opinions?

20 A. I certainly reviewed it and tried to learn as much  
21 as I could in addition to the patent to help me with my  
22 understanding of the claim terms.

23 Q. Does the prosecution history affect your opinions  
24 on the '541 patent?

25 A. Probably nothing beyond what I have in the

1 paragraphs where I discuss the file histories for both of  
2 these patents in my report.

3 Q. So we are looking at that right now for the '541  
4 patent, correct?

5 A. Yes. Starting on, I guess, paragraph 43 but more  
6 substantively paragraph 44 on page 16.

7 Q. So does what -- what you say here, does this  
8 affect your claim construction opinions for the terms of  
9 the '541 patent?

10 A. I don't know if "affect" is the right word.  
11 Certainly, reviewing the amendments, you know -- trying to  
12 do that and make a good faith effort to look at the whole  
13 file history and, of course, the patent itself to try to  
14 understand what the claim terms mean was just part of the  
15 work that I did.

16 I list here, you know, one example of how the  
17 claim terms were amended. And I guess there is some  
18 context you could learn by -- or try to learn by seeing  
19 what was changed, because maybe there is some key words  
20 that help explain, because they tried to improve it, or you  
21 would hope that's the goal.

22 Q. And so you do have here, you know, the -- how the  
23 claim language was amended. But what is that telling  
24 you -- what information is that giving you that would be  
25 relevant?

1 A. I guess the possibility of a little extra context  
2 to try to get more understanding of what they might mean,  
3 because this is just changes to the claim terms that may be  
4 reflected in the written description of the patent that may  
5 give a little more context.

6 Q. Sure. And I'm not asking generally, Dr. Turnbull.  
7 I'm asking, looking at this specific amendment, can you  
8 describe for me what -- I mean, what specific thing is  
9 relevant or what you're taking from this that might be  
10 relevant to your opinions?

11 A. I don't know if this shows anything specifically  
12 that I built upon to form my opinions.

13 Q. And you don't discuss that, do you, in your  
14 report?

15 A. No. Other than here. No.

16 Q. You show the amendments, but you're not explaining  
17 A, B, C, what we are learning from these specific  
18 amendments.

19 A. That's right.

20 Q. Can we look at the next subsection, overview of  
21 the -- I'm sorry.

22 Subsection D, prosecution history of the '613  
23 patent above paragraph 48.

24 A. Okay. On page 17. I'm with you.

25 Q. And here it's short, but in para 49, you provide

1 an overview or summary of the '613 patent prosecution

2 history. Do you see that?

3 A. That's right. Yes.

4 Q. Do you rely on the prosecution history of the '613  
5 patent for your claim construction opinions?

6 A. It was part of the documentation that I reviewed.

7 I don't recall if it gave me any additional insights, but I  
8 definitely reviewed it.

9 Q. Can you identify any insights that would be  
10 relevant to your opinions either from the prosecution  
11 history or stated here about this '613 patent?

12 A. Sitting here right now, nothing comes to mind.

13 Q. You say that the applicant filed a preliminary  
14 amendment and additional -- and an additional  
15 nonsubstantive amendment following an Ex parte Quayle  
16 action.

17 Do you see that?

18 A. I do.

19 Q. What is an Ex parte Quayle action?

20 A. I remember looking it up, but I've forgotten what  
21 it means by now.

22 Q. Okay. Let's talk about the first term. Can you  
23 go to paragraph 50 of your report.

24 A. I'm with you. Page 18, paragraph 50.

25 Q. Excuse me. My light turned off, so I had to turn

1 it on.

2 So your opinion is about the term "one or more  
3 prospective -- dot, dot, dot -- communications [over  
4 wireless network]." Correct?

5 A. That's right. That's what we're talking about  
6 here.

7 Q. And you're not offering any claim construction  
8 opinions about any other terms?

9 (Clarification by the certified stenographer.)

10 ATTORNEY VINCENT: Object to form.

11 THE WITNESS: Well, we have more in my report  
12 discussing some other claim terms, but here, this is what  
13 we're discussing, if that's what you're asking.

14 BY ATTORNEY WANG:

15 Q. Do you have the claim language of claim 1 in your  
16 report?

17 A. I think I have this selected part of it, and it's  
18 possible it's up above, but maybe not.

19 Q. Do you have the claim language of the claims that  
20 you offer opinions on reproduced in your report?

21 A. I think that's what we see in -- I guess it's  
22 section A or header A we see a quote from the claim  
23 language itself. So it's produced there.

24 Q. In what paragraph are you referring to?

25 A. I guess it's -- I know it's -- on page 18 it says

1 A, section A. So I don't know if that's called paragraph A  
2 or not. It's just a heading. And you can see the claim  
3 language is there in quotations.

4 Q. Right. And so this is the claim term, right?

5 A. Yes.

6 Q. But the full claim language of claim 1, do you  
7 have it?

8 A. Oh, I don't think I inserted the whole -- the  
9 whole claim here. I was just inserting the relevant terms  
10 that I was discussing in this report.

11 Q. While we're on this, looking at the heading, do  
12 you see how you have brackets around over wireless network?

13 A. I do.

14 Q. How should we understand that? What do you mean  
15 by the brackets?

16 A. We could look at the claim itself if you want to  
17 introduce the '541 as an exhibit. I think it's  
18 representing the fact that that is in the claim language,  
19 and we may have the beginning part of the quote in there  
20 more than once. So I think it's kind of a shorthand for  
21 referring to the claim term generally.

22 Q. Okay. Do you mean that it may appear twice, like  
23 one that has the full phrase -- dot, dot, dot --  
24 communications over wireless network, and then again -- and  
25 it just says communications?

1 A. Maybe something like that. I just don't recall.

2 If we pull it up, we can probably verify that if you're  
3 curious.

4 Q. If -- if the phrase is always -- and we'll confirm  
5 that in the claim, but if it's always communications over a  
6 wireless network, would it be appropriate to look at that  
7 term?

8 ATTORNEY VINCENT: Object to form.

9 THE WITNESS: If the word "always" is in there?

10 BY ATTORNEY WANG:

11 Q. No, no, no. If it -- if it always says  
12 communications over wireless network. Are you proposing to  
13 construe it with or without the last part?

14 ATTORNEY VINCENT: Object to form.

15 THE WITNESS: I guess just what I have here. I've  
16 included it, so that's what I'm discussing here.

17 BY ATTORNEY WANG:

18 Q. So what do you mean by the brackets?

19 A. I thought I answered that already. I'm not sure  
20 what else you're asking.

21 Q. Does the brackets mean that it can be omitted?

22 ATTORNEY VINCENT: Object to form.

23 THE WITNESS: I think it's there to -- because  
24 it's in the claim terms and it's modifying the  
25 communications, it gives an understanding of

1 communications. So that's why it's there.

2 ATTORNEY WANG: Let's -- let's -- I'm going to  
3 introduce two exhibits, Exhibits 3 and 4, and they will be  
4 the '541 and the '613 patents. So I'll go ahead and send  
5 them via the Zoom.

6 THE WITNESS: Okay.

7 (Exhibit 3 was presented and subsequently marked  
8 for identification.)

9 (Exhibit 4 was presented and subsequently marked  
10 for identification.)

11 THE WITNESS: Okay. I've got Exhibit 3 and 4. 3  
12 is, I guess, what we'll call '541 patent. And looks like  
13 it's the full PDF of that. 100 pages.

14 And then I also downloaded Exhibit 4, which I  
15 guess we'll call the '613 patent. And it looks like that's  
16 the entire PDF that is 94 pages by my count.

17 BY ATTORNEY WANG:

18 Q. Thank you, Dr. Turnbull. So I will just repeat  
19 what you said, which is I'm introducing as Exhibit 3 to  
20 Dr. Turnbull's deposition a PDF that's entitled U.S. Patent  
21 Number 8,589,541, and the document is 100 pages. And, in  
22 short, we'll refer to this as the '541 patent.

23 Dr. Turnbull, does this document, Exhibit 3,  
24 appear to be a true and correct copy of the '541 patent  
25 that you discuss in your report?

1 A. It does.

2 Q. And then, if you could open Exhibit 4, I will  
3 introduce as Exhibit 4 a patent, U.S. Patent  
4 Number 9,215,613. It is a PDF document of 94 pages. We  
5 will refer to it, in short, as the '613 patent.

6 Dr. Turnbull, does this Exhibit 4 appear to be a  
7 true and correct copy of the '613 patent that you discuss  
8 in your report?

9 A. It does.

10 Q. So let's open Exhibit 3. And if you could turn to  
11 claim 1 of Exhibit 3 of the '541 patent.

12 A. Okay. I'm there. Looks like it's column 110.

13 Q. Okay. I want to turn your attention to the middle  
14 of the claim, around -- starting on line 21. It says  
15 (as read):

16 The service usage activity comprising one or  
17 more prospective or successful communications over  
18 a wireless network.

19 Right?

20 A. Yes.

21 Q. And the term that you've identified for  
22 construction in your report is -- is part of that phrase I  
23 just read, right?

24 A. That's right.

25 Q. So first let me ask you. The term that you are

1 proposing for construction is one or more prospective --

2 dot, dot, dot -- communications over a wireless network.

3 Right?

4 A. Yes.

5 Q. And so the other words of the claim -- do you see

6 it begins with, the service usage activity? Or, the

7 service usage activity comprising?

8 Do you see that?

9 A. I do.

10 Q. That's not part of your term for construction,

11 right?

12 A. No.

13 Q. And so you don't opine that -- you aren't offering

14 any opinions about the meaning of that term?

15 A. No.

16 Q. You don't offer any opinions that that term is

17 indefinite?

18 A. No opinion either way.

19 Q. And then do you see part of the claim language

20 that says, successful communications over a wireless

21 network?

22 A. Yes.

23 Q. I guess it can be plural or not. Successful

24 communication or communications over a wireless network.

25 Do you -- do you see that?

1 A. Yeah. It looks like it's plural.

2 Q. And that part, successful communications over a  
3 wireless network, you don't have an opinion that that's  
4 indefinite, right?

5 A. Could you ask the question again, please?

6 Q. Sure.

7 Let me try it again.

8 So the part of this claim phrase that says, one or  
9 more successful communications over a wireless network or  
10 just successful communications over a wireless network --  
11 are you with me?

12 A. Yes.

13 Q. That's not the term that you're proposing for  
14 construction.

15 A. That's right.

16 Q. And you don't offer any opinion that that phrase  
17 is indefinite?

18 A. No.

19 Q. That phrase being successful communications over a  
20 wireless network.

21 A. That's right.

22 Q. In fact, returning to your declaration, your  
23 opinion is that the scope of a, quote, successful  
24 communication is sufficiently clear, correct?

25 A. Yes.

1 Q. And let's go back to your declaration and look at  
2 paragraph 53.

3 A. Okay. I think that's where we were anyway.

4 Q. Yes.

5 And you say that the scope of a successful  
6 communication over wireless network is sufficiently clear  
7 to you.

8 A. Yes. That's what I've got there in paragraph 53.

9 Q. And you're making this statement like in the  
10 context of the claims and specification of the '541 patent,  
11 right?

12 A. Yes.

13 Q. And you say that it means a communication that  
14 successfully travels over a wireless network to its  
15 intended destination?

16 A. That's right.

17 Q. And then you say, i.e., a successful communication  
18 over a wireless network.

19 Do you see that?

20 A. That's right.

21 Q. And so what does "i.e." mean?

22 A. "In other words."

23 Q. Or it means "that is," right?

24 A. Yeah.

25 Q. So here, you're pretty much saying that, you

1 know -- the longer phrased -- that is what a successful  
2 communication over a wireless network is, right?

3 A. Yes.

4 Q. Have you heard of the word "prospective" before?

5 A. Sure.

6 Q. What does "prospective" mean?

7 ATTORNEY VINCENT: Object to form.

8 THE WITNESS: I guess it refers to something that  
9 is eligible. "Potential" maybe is more accurate. Just  
10 generally ideas like that.

11 BY ATTORNEY WANG:

12 Q. And that's the meaning in English usage?

13 A. I don't know if that's the dictionary definition,  
14 but you just asking me, that comes to mind.

15 Q. And the words that you gave were "eligible" or  
16 "potential," right?

17 A. Yes.

18 Q. And you said that maybe "potential" is more  
19 accurate?

20 A. Yes.

21 Q. Are you married, Dr. Turnbull?

22 A. I'm not sure how to answer that question.

23 Q. I didn't mean to be appropriate.

24 But if -- I mean, would it make sense to think of  
25 someone as a prospective partner or a prospective spouse?

1 ATTORNEY VINCENT: Object to form.

2 THE WITNESS: I guess that would be one type of  
3 prospective something. Yes.

4 BY ATTORNEY WANG:

5 Q. And that might fit the meaning of "eligible" or  
6 "potential"?

7 A. Oh, I see. "Eligible" maybe cued you in to that  
8 line of thought.

9 Yeah. I think that's true. I think, you know,  
10 relationships between two people maybe is a little  
11 different than, you know, for technical things, but I think  
12 we're in the same ballpark with ideas like that.

13 Q. I want to turn your attention to -- okay. In  
14 the '541 patent -- and we can -- we can look at the claim  
15 language. It talks about service usage activities, right?

16 A. That's right. We discussed that a little bit a  
17 few minutes ago.

18 Q. And it says that the service usage activity can  
19 comprise one or more communications.

20 ATTORNEY VINCENT: Object to form.

21 BY ATTORNEY WANG:

22 Q. Right?

23 A. Yes.

24 Q. So I want to ask you about paragraph 58 of your  
25 report.

1 A. Okay.

2 Q. In paragraph 58, again, you say, the '541 patent  
3 includes extensive disclosures regarding how particular  
4 service usage activities may be initiated.

5 Do you see that?

6 A. I do. We're following that paragraph onto the  
7 next page, page 21 of my report.

8 Q. Yes.

9 And I just want to focus on this first part  
10 (as read):

11 The '51- -- '541 patent includes extensive  
12 disclosures regarding how particular service usage  
13 activities may be initiated.

14 You see that?

15 A. I do.

16 Q. And does this also refer to service usage  
17 activities that comprise one or more communications?

18 ATTORNEY VINCENT: Object to form.

19 THE WITNESS: It's certainly referring to  
20 communications, types of communications.

21 BY ATTORNEY WANG:

22 Q. And so, when you say "may be initiated," you are  
23 referring to communications or one or more communications.  
24 That would fit into what you're describing?

25 ATTORNEY VINCENT: Object to form.

1           THE WITNESS: I guess the communications would be  
2 part of a service usage activities as we see in some of the  
3 examples that I cite here in the patent.

4 BY ATTORNEY WANG:

5 Q.       And when you're -- and when you're talking about  
6 may be initiated, that would apply to communication -- a  
7 communication may be initiated?

8 A.       The activities of which a communication may be  
9 part of the activity, yes.

10 Q.       Does it make sense to talk about a communication  
11 being initiated?

12           ATTORNEY VINCENT: Object to form.

13           THE WITNESS: Generally or related to something  
14 specifically?

15 BY ATTORNEY WANG:

16 Q.       I mean communication in the context of the patent  
17 in the context of this sentence.

18 A.       I guess, to some extent, we have, you know, a  
19 service usage activity that could have one or more types of  
20 communications and, again, over a wireless network, as  
21 we've been discussing.

22 Q.       Okay. Let's talk about when a communication is  
23 initiated. At that point, the communication is not a  
24 successful communication, right?

25 A.       No.

1 Q. And that's because, if you read the rest of your  
2 sentence, the communication's subsequently blocked,  
3 throttled, or otherwise not permitted to be -- to occur,  
4 right?

5 A. That's right.

6 Q. Okay. So in this sentence beginning with,  
7 the '541 patent includes extensive disclosures, you're not  
8 referring to successful communications over a wireless  
9 network.

10 A. Yes. That's right.

11 Q. Okay. And so -- then I want to -- returning back  
12 to this sentence, and then we're talking about  
13 communications, and then we talk about communications that  
14 may be initiated.

15 Are you with me so far?

16 A. I think so. I think that's what we were talking  
17 about.

18 Q. Let's discuss this situation after a communication  
19 is initiated. Would that be a prospective communication  
20 over a wireless network?

21 A. I don't know. That's not what it says throughout  
22 the patent. I think, if they wanted to say prospective,  
23 that's what they would have said. But that's not what they  
24 say.

25 Q. But I'm asking you for your -- for your

1 understanding. So we're talking about a communication in  
2 this sentence. We're talking about right after it's  
3 initiated. And we're stopping there.

4 Would that be a prospective communication over a  
5 wireless network?

6 A. We can't tell, and, again, that's why we have this  
7 whole discussion. It's just not described precisely  
8 anywhere in the patent. They just don't give you that  
9 definition of what "prospective" means, and that's why it's  
10 indefinite.

11 Q. Okay. Well, I'm asking you as a person of  
12 skill -- skill in the art. Why wouldn't it be considered a  
13 prospective communication over a wireless network?

14 A. Why wouldn't "it"?

15 Q. Yes. The communication after it's initiated.

16 A. Because there can be more than one type of  
17 communication or class of communication, and all we see in  
18 your example or all we hear in your example is this  
19 communicated that's -- communication that's initiated.

20 There's no definition, other than by some examples, what  
21 that means.

22 And my understanding of computer science and how  
23 communication protocols work -- a prospective communication  
24 could be something different than an initiated  
25 communication.

1        And that's why, if they had stated that correctly  
2    or defined that somewhere in all 99 pages of the patent, we  
3    probably wouldn't be having this discussion. It's just --  
4    it's not definite what the terms mean. I am not going to  
5    say that it's interchangeable with "initiated."

6    Q.    Okay. So we -- we already talked about -- and you  
7    have no problem understanding that it's not a successful  
8    communication over a wireless network, right?

9    A.    At least at that phase as we hope to understand  
10   it.

11   Q.    So we agree on that. So why would it not be  
12   considered by a --

13                (Clarification by the certified stenographer.)

14   BY ATTORNEY WANG:

15   Q.    Why would it not be considered by a POSITA to be a  
16   prospective communication over a wireless network?

17   A.    Are you asking why an initiated --

18   Q.    Yes.

19   A.    -- communication as they define it would not be  
20   the same thing as a prospective communication?

21   Q.    No, no. What -- okay.

22                Returning to your opinion in paragraph 58.

23   A.    Uh-huh.

24   Q.    And we're discussing a communication that is  
25   initiated. At that point, why would the communication --

1 why couldn't the communication be considered a prospective  
2 communication over a wireless network?

3 A. Why couldn't it be considered?

4 Q. Yeah, yeah. Why not?

5 A. It's possible, but there could be other types of  
6 prospective communications as well. So it's not a  
7 one-to-one match. Again, we just don't have enough clarity  
8 in the patent to define what prospective means because  
9 it's -- it's not used.

10 Q. Okay. So you agree with me that a POSITA could  
11 consider a communication when it's initiated to be a  
12 prospective communication over a wireless network?

13 A. There could be many, many types of possibilities  
14 that the communication -- of communication types. Again,  
15 we don't see in the patent them defining what prospective  
16 is, so it's indefinite. And I guess it's possible that a  
17 person of skill might think it could be, but it's not  
18 taught in the patent. There's no clarity about what that  
19 means. If someone is struggling and saying this is a  
20 communication, maybe it's that, but also maybe it's not.

21 Maybe sometimes it is; maybe sometimes it's not. There's  
22 just no clarity in the written description to let us  
23 understand that.

24 Q. Okay. I want you to focus on my question,  
25 Dr. Turnbull. So I'm focusing on this hypothetical of a

1 communication that's initiated.

2 And my question to you was that -- could a POSITA  
3 consider this a prospective communication over a wireless  
4 network. And I believe your answer was that a POSITA  
5 could -- could consider it that, right?

6 I'm not asking about anything else. I want you to  
7 stick to my question. My first question is, could a POSITA  
8 consider that to be a prospective communication over a  
9 wireless network?

10 A. I think we just don't know because it's just not  
11 defined well enough.

12 Q. I mean, earlier I asked you. Your response was:  
13 I guess it's possible that a person of skill might think it  
14 could be what I said.

15 Do you stand by that?

16 A. It's also just as impossible. It's just one of  
17 the things when you have something that's not defined that  
18 you're kind of guessing what it might be.

19 Q. So I do understand your testimony that maybe it  
20 could be considered other things, right, but I'm focusing  
21 on what I'm -- the hypothetical I'm presenting, right,  
22 which is the communication is initiated. At that point,  
23 could a POSITA consider that a prospective communication  
24 over a wireless network?

25 A. Yeah. I just don't know if they could or not.

1 Even the fact that you mentioned as a hypothetical, it just  
2 depends on what the technical architecture might or might  
3 not be, what -- how the system works. There are just too  
4 many unknowns there. It literally is indefinite.

5 Q. Okay. Can you tell me -- can you then -- can you  
6 explain to me why a person would not consider it a  
7 prospective communication over a wireless network?

8 A. Oh, gosh. I think that's like proving a negative.  
9 Maybe I can answer it this way. And if it's not right, you  
10 can ask that again. You know, when you're building  
11 software, you have to be precise. And when you're  
12 describing an invention that should be what a patent is  
13 about, you need to describe that and then, I guess, prove  
14 it's novel, that it's patentable.

15 And in order to do that, you have to be precise in  
16 describing that, especially with software, where I could  
17 have 10,000 lines of code. And one thing is wrong; it  
18 won't work. So precision is required.

19 It's required in describing what you're telling  
20 someone how to build. You're teaching in the patent. And  
21 in this case, it's not specified. It's not described in  
22 the written description. The variety of hypothetical or  
23 technical ways that, you know, have variations as well are  
24 so wide that you just aren't taught that in this. There  
25 are just no definition for what that term means in the

1 patent. So a person of skill might try to guess, but it  
2 would be just that, because it's not defined.  
3 Q. Okay. So that -- that was kind of a general  
4 answer. But I want to know if you can give me some  
5 specifics. If we're two persons of ordinary skill, right,  
6 and one said, yes, after it's initiated, I think it would  
7 be or could be considered a communication -- a prospective  
8 communication over a wireless network.

9 If the other person of skill disagreed and said,  
10 no, it could not be, it would not be considered that, what  
11 would be the technical reasons why it would not be  
12 considered that? Can you give me specific technical  
13 reasons?

14 A. I guess, before I have a technical reason, I would  
15 say that your person 1 actually used the term and tried to  
16 define it. They said this initiated one could be  
17 prospective. And then you could argue about that and say  
18 what do you mean and what are the parameters. But that's  
19 already what person 1 did, more than we have in the patent.

20 So if that existed in the patent, we probably  
21 wouldn't be having this discussion. So the hypothetical of  
22 a person 1 literally trying to define it, that's great.

23 Then that's kind of a different discussion than us trying  
24 to make sense of what "prospective" means because it's not  
25 mentioned in the patent. I don't know if you follow me

1 there, but that's my thought there.

2 Q. Right.

3 Dr. Turnbull, I don't know if this is an attempt  
4 to define it. We're looking at your opinions in your  
5 report, right? And you're talking about -- you know,  
6 you're talking about how communication may be initiated,  
7 right? So we're going along with -- and we're looking at  
8 it then. And so I'm -- and that was how my question  
9 started. We're looking at the communication then.

10 After it's initiated -- right after it's  
11 initiated, and that's what our POSITA or two POSITAs are  
12 looking at. And so what I'm proposing is that a POSITA  
13 would consider that a prospective communication over a  
14 wireless network.

15 Can you explain to me why -- specific technical  
16 reasons why that would not be the case to a POSITA.

17 A. I really can't because we just don't have enough  
18 of the technical architecture to discuss. That's just --  
19 that is like a hypothetical -- of a hypothetical universe  
20 of technical things. Probably simply -- and maybe I said  
21 this before, but it's my way of thinking about it. And  
22 that's what I say in my report. Is that, if something were  
23 to be described as maybe initiated, that's what it's  
24 described as. And if it were described as prospective, I  
25 would understand that that's something different if that

1 was explained.

2 So I can't map initiated to prospective because  
3 systems are just more complicated than that. Hypothetical  
4 and real. You could have things that are prospective but  
5 not even initiated yet. There's just the -- the breadth of  
6 that is just simply too -- too broad, and it's just not  
7 defined in the patent, and that really is a problem in, you  
8 know, the claim term and the written description.

9 Q. Can we look at the rest of your sentence in  
10 paragraph 58. You say (as read):

11 May be initiated but are subsequently blocked,  
12 throttled, or otherwise not permitted to occur.

13 Do you see that?

14 A. I do.

15 Q. Those things could happen as a result of applying  
16 a network control policy, correct?

17 A. I guess at least that. There may be other things  
18 the patent describes related to, say, blocking, if I  
19 remember.

20 ATTORNEY VINCENT: Hey, Philip, we've been going  
21 about an hour, so whenever you get a stopping point would  
22 be good.

23 ATTORNEY WANG: Sure. I'll try to wrap up shortly  
24 on this line of questioning.

25 ////

1 BY ATTORNEY WANG:

2 Q. So you agree that blocked, throttled, or otherwise  
3 not permitted to occur can be the result of applying a  
4 network control policy?

5 ATTORNEY VINCENT: Object to form.

6 THE WITNESS: I don't know if that's the exact  
7 phrase in the patent, but I think generally that would be  
8 the types of things that we might see that could happen  
9 over a network when there's some control over it.

10 BY ATTORNEY WANG:

11 Q. And what about what's described in the claim about  
12 applying a policy?

13 A. Yeah. That's what I thought you were referring  
14 to.

15 Q. Okay. Okay. All right. So we were talking about  
16 that in the claim of policy.

17 Okay. Let's go off the record.

18 (Clarification by the certified stenographer.)

19 ATTORNEY VINCENT: Yes.

20 THE VIDEOGRAPHER: All right. The time is  
21 now 11:14 a.m. We're going off the video record.

22 (Recess taken.)

23 THE VIDEOGRAPHER: The time is now 11:25 a.m., and  
24 we are back on the video record.

25 ////

1 BY ATTORNEY WANG:

2 Q. Welcome back, Dr. Turnbull.

3 A. Thank you.

4 Q. Did you speak to your counsel during our break?

5 ATTORNEY VINCENT: You can answer that question

6 yes or no.

7 THE WITNESS: Yes.

8 BY ATTORNEY WANG:

9 Q. Did you discuss the substance of your testimony

10 with counsel during our break?

11 ATTORNEY VINCENT: I'm instructing the witness not

12 to answer.

13 BY ATTORNEY WANG:

14 Q. Will you follow that instruction?

15 A. I will.

16 Q. Dr. Turnbull, let's turn to paragraph 61 of your

17 report.

18 A. Okay. On page 21.

19 Q. Yes.

20 So at the very, very end of it, you say (as read):

21 As I discuss above, this is the fundamental

22 purpose of the invention described in the '541

23 patent, namely, to --

24 (Clarification by the certified stenographer.)

25 ////

1 BY ATTORNEY WANG:

2 Q. Sure. Let me start again.

3 In paragraph 61 of your report, Doctor, at the end  
4 of that paragraph, you say, quote (as read):

5 As I discuss above, this is the fundamental  
6 purpose of the invention described in the '541  
7 patent, namely, to prevent certain background  
8 activity from accessing a wireless network in  
9 certain instances, end quote.

10 Do you see that?

11 A. I do.

12 Q. And do you agree with that?

13 A. Yes.

14 Q. And the way that certain background activity is  
15 prevented from accessing a wireless network is by applying  
16 a network control policy, correct?

17 ATTORNEY VINCENT: Object to form.

18 THE WITNESS: I guess, generally, yes.

19 BY ATTORNEY WANG:

20 Q. And that's the -- network control policy is the  
21 claimed term policy in claim 1 of the '541 patent?

22 ATTORNEY VINCENT: Object to form.

23 THE WITNESS: Yes.

24 BY ATTORNEY WANG:

25 Q. So claim 1 of the '541 patent describes

1 communications -- sorry. Strike that.

2 Claim 1 in the '541 patent describes applying  
3 policies to communications.

4 ATTORNEY VINCENT: Object to form.

5 THE WITNESS: Was that a question?

6 BY ATTORNEY WANG:

7 Q. Yes.

8 A. Oh. I'm sorry.

9 Q. Yes. Do you agree that claim 1 in the '541 patent  
10 describes applying policies to communications?

11 ATTORNEY VINCENT: Object to form.

12 THE WITNESS: To communications over wireless  
13 network, yes, because that's what it says there.

14 BY ATTORNEY WANG:

15 Q. Okay. Let me just rephrase again to get your --  
16 to get your answer correct.

17 A. Okay.

18 Q. Do you agree that claim 1 of the '541 patent  
19 describes applying policies to communications over a  
20 wireless network?

21 ATTORNEY VINCENT: Object to form.

22 THE WITNESS: Mostly, yes.

23 BY ATTORNEY WANG:

24 Q. And then, at the top of paragraph 61, do you see  
25 in the first sentence you have three terms that are in

1 quotes: communication, prospective communication, and a  
2 successful communication?

3 Do you see that?

4 A. I do.

5 Q. And as we discussed before, your indefiniteness  
6 opinion is about the middle term, right, prospective  
7 communication?

8 A. That's right.

9 Q. You don't have an opinion that the term  
10 "communication" by itself is indefinite, the first term?

11 A. No.

12 Q. And you don't have the opinion that the third  
13 quoted term, "successful communication," is indefinite?

14 A. No.

15 Q. Can you turn to paragraph 62 of your report.

16 A. Okay. I'm with you. We're on page 22 now.

17 Q. Yes.

18 Okay. So in the middle of this paragraph you talk  
19 about like the illogical result of the, quote (as read):

20 Successful communication over a wireless  
21 network from being blocked from leaving the device  
22 at all.

23 Do you see that?

24 A. Yes.

25 Q. Okay. Does the --

1 (Clarification by the certified stenographer.)

2 BY ATTORNEY WANG:

3 Q. Does claim 1 of the '541 patent require this?

4 ATTORNEY VINCENT: Object to form.

5 THE WITNESS: I think, like I say here, the claim  
6 describes a situation where you have the successful  
7 communication over a wireless network, and the problem  
8 therein with that, as I described in all with paragraph 62  
9 here, it's counterintuitive or just incorrect or vague.

10 (Disruption in the Zoom connection.)

11 (Clarification by the certified stenographer.)

12 ATTORNEY WANG: Yes. Let's go off the record.

13 ATTORNEY VINCENT: Sure.

14 THE VIDEOGRAPHER: The time is now 11:32 a.m.,  
15 and we're going off the video record.

16 (Discussion held off the record.)

17 THE VIDEOGRAPHER: All right.

18 ATTORNEY WANG: Welcome back, Dr. Turnbull.

19 THE VIDEOGRAPHER: The time is now 11:35 a.m.

20 We're back on the video record.

21 Sorry.

22 BY ATTORNEY WANG:

23 Q. Welcome back, Dr. Turnbull.

24 A. Thank you.

25 Q. We had some technical difficulties, and so at the

1 risk of being redundant, I may replow some of the ground we  
2 just covered.

3 So we were talking about your opinion in  
4 paragraph 62 where you discuss the illogical result of the  
5 successful communication over a wireless network from being  
6 blocked from leaving the device at all.

7 Do you recall that?

8 A. Yes.

9 Q. And then my question was, does claim 1 of the '541  
10 patent require this. And so I'll ask that question again  
11 and allow you to respond.

12 ATTORNEY VINCENT: Object to form.

13 THE WITNESS: Does claim 1 require that it be  
14 blocked? I'm not sure of the question now.

15 BY ATTORNEY WANG:

16 Q. Yes. Does claim 1 require the situation where a  
17 successful communication over a wireless network is blocked  
18 from leaving the device at all?

19 A. It has the policy that it mentions, and in the  
20 embodiments, there are examples where the policy could be  
21 blocking the communication from leaving the device. And I  
22 think that's kind of what I have here. Still not sure if  
23 that's the question you asked.

24 Q. Does applying a policy to communication require  
25 the communication to be blocked from leaving the device at

1 all?

2 A. It can be one aspect, or, again, from the patent,  
3 one of the embodiments could include blocking the network  
4 communication.

5 Q. But does it require it?

6 ATTORNEY VINCENT: Object to form.

7 THE WITNESS: Just in the sense that it's one of  
8 the potential things that the policy that is described in  
9 claim 1 could be applied to a communication.

10 BY ATTORNEY WANG:

11 Q. Right.

12 But -- and when we're talking about the word  
13 "policy," it's just a policy, right? The policy could lead  
14 to different results -- I mean, that's part of the  
15 definition of policy, right?

16 A. I would think the policy would -- I don't know. I  
17 feel like "lead to" is not the right phrase. That's why  
18 I'm trying to improve upon that for us.

19 The policy, I guess, could enforce or -- no.

20 That's not right either.

21 I'm not -- I'm not sure of the right word.

22 Q. Sure. But there is a distinction. You could  
23 apply a policy to a communication, for example, but  
24 depending on what the policy is or the circumstances of the  
25 device, it could result in a communication being blocked or

1 not.

2 Do you agree with that as a general matter?

3 A. It could result in -- from the examples we have in  
4 the Petnik [phonetic] result in the policy being blocked or  
5 something else about the communication.

6 Q. And could it result in the communication being  
7 allowed?

8 A. Huh. I guess that's what we're discussing here,  
9 is that, if it's allowed, it's already happened. So the  
10 policy isn't relevant. So that's maybe not a good word  
11 either, or that's just not how the policy step is.

12 Q. You could still think about the policy as being  
13 applied. It's just that the -- under the policy, the  
14 communication was allowed?

15 A. Maybe this will help. You can tell me. If the  
16 policy doesn't block it, the communication might be  
17 allowed. I think we might be saying the same thing. I'm  
18 just trying to be more specific.

19 Q. And that would be a successful communication over  
20 a wireless network?

21 A. It could be. We just don't know.

22 Q. Can we turn to section B of your report. It's on  
23 page 22.

24 A. Yeah. I'm with you. It's the same page.

25 Q. So we talked about this before. But in this

1 heading, you have kind of three terms that are all put  
2 together in the heading.

3 A. Uh-huh.

4 Q. Right?

5 A. Yes.

6 Q. Okay. So the first term is from claim 1 in the  
7 '541 patent, the second term is from claim 1 of the '613  
8 patent, and the third term is from claim 6 of the '613  
9 patent.

10 Do you see that?

11 A. That's right.

12 Q. Why are you grouping these three terms together  
13 into one heading?

14 ATTORNEY VINCENT: Object to form.

15 THE WITNESS: Because they're related to  
16 background activity.

17 BY ATTORNEY WANG:

18 Q. So you're putting them together because you  
19 believe that they're all related to the term background  
20 activity?

21 A. That's right.

22 Q. I understand your opinion that each of these three  
23 terms is indefinite, correct?

24 A. That's right.

25 Q. Do your opinions for these terms depend on one

1 another?

2 ATTORNEY VINCENT: Object to form.

3 THE WITNESS: Maybe ask that again. I think I

4 missed the second word in your question.

5 BY ATTORNEY WANG:

6 Q. Do your opinions for these terms depend on one

7 another?

8 ATTORNEY VINCENT: Object to form.

9 THE WITNESS: I don't think so. I think they

10 depend on the entire body of the patent to give an

11 understanding of what these claim terms mean. Again,

12 they're here in one section because they're all related,

13 again, maybe focused more around the idea of background

14 activity as a claim term than other things.

15 BY ATTORNEY WANG:

16 Q. Okay. So your opinions for each of these three

17 terms are independent from one another?

18 ATTORNEY VINCENT: Object to form.

19 THE WITNESS: I think they're related just because

20 they're all terms from the same written description. So

21 there's some dependency there.

22 BY ATTORNEY WANG:

23 Q. So if one of these terms were found not to be

24 indefinite, would that affect your opinions for the other

25 terms?

1 A. No. I would think about them individually because  
2 they are different sets of terms, again, related to the  
3 same general idea.

4 Q. Okay. So putting them together in the same  
5 section, you understand that you have to -- that your  
6 opinions are separate for each of these terms?

7 A. They're related. That's why I put them together  
8 here.

9 Q. Okay.

10 Can we look at paragraph 66 of your report?

11 A. I'm on that page. Page 23 right now. So I'm with  
12 you.

13 Q. Okay. You seem to be discussing, you know, each  
14 of these terms and making some opinions. And so you begin  
15 with -- you say that there's no disclosure to reasonably  
16 establish what constitutes the, quote (as read):

17 Foreground or the, quote, background.

18 Do you see that?

19 A. That's right. And that's what I continue to do in  
20 the following paragraphs.

21 Q. Okay. Are you making that opinion regarding the  
22 first term background activity, in claim 1 of the '541  
23 patent?

24 A. That's right. And the other claim terms as well.

25 Q. Okay. Did the term -- the first term that we're

1 talking about is background activity, correct?

2 A. We could talk about that first. Sure.

3 Q. But that is the first term, quote, background

4 activity, correct?

5 A. Yeah. In that heading, level B, that's right.

6 Q. The term does not just say background, right?

7 A. Yes.

8 Q. We can look at claim 1, which is Exhibit 3 of

9 the '541 patent.

10 A. Okay.

11 Q. Do you see that the term "background activity"

12 appears three times in claim 1?

13 A. Yeah. It looks like three times in claim 1.

14 Q. And the word "background" is always followed by

15 activity, right?

16 A. Yes. All three times.

17 Q. It never just says background?

18 A. No.

19 Q. Is the term "background activity" a technical term

20 of art?

21 A. Not really. It's pretty vague.

22 Q. Have you heard the term before?

23 A. I don't recall if I have.

24 Q. Do you offer any opinion that it's not a technical

25 term of art?

1 A. No. Other than my discussion in trying to make  
2 sense of it in the claim, in the patent itself.

3 Q. Do you offer any opinion that it would be a term  
4 unknown to persons of skill in the art?

5 ATTORNEY VINCENT: Object to form.

6 THE WITNESS: I think that's what this whole  
7 section is about, in fact.

8 BY ATTORNEY WANG:

9 Q. Maybe you can point me to what you're talking  
10 about. But my question is, do you offer the opinion that a  
11 person of skill in the art would not know what, quote,  
12 background activity means?

13 A. Again, I think that's what this whole section is  
14 about. I think we were just talking about paragraph 66.  
15 And as you can see, I say in paragraph 66, the second  
16 sentence (as read):

17 As I discuss below, each of these terms is  
18 ambiguous and fails to inform a POSITA -- or  
19 POSITA -- as to the scope of the claims in these  
20 patents -- those patents, because there is no  
21 disclosure to reasonably establish what  
22 constitutes the foreground or the background.

23 Q. I mean, I do see that you have some statements  
24 about foreground or background, but my question was  
25 specific to the term "background activity."

1        Do you offer the opinion that that term would be  
2    unfamiliar to persons of skill in the art, and if so, can  
3    you point me to that?

4        ATTORNEY VINCENT: Object to form.

5        THE WITNESS: I think it goes without saying that  
6    it's something that a person wouldn't know, because I'm  
7    trying to at least establish an understanding of not even  
8    just what activity means, which is also vague, but I'm  
9    trying to help define it in the context of background  
10   activity in this case. And I'm contrasting that type of  
11   activity, a background activity, in trying to understand it  
12   in contrast to the foreground activity of which that seems  
13   to be the only two types of activities that are referred  
14   to.

15   BY ATTORNEY WANG:

16   Q.    But you say that the specification -- in  
17   paragraph 72, you say that the specification provides some  
18   differentiation between background activities and other  
19   activities, right?

20   A.    That's right.

21   Q.    And then that paragraph has some citations to  
22   the '541 patent, correct?

23   A.    Yes.

24   Q.    And, yeah, you cite to column 23, to column 32,  
25   and column 18. Do you see that?

1 A. I see all three of those. Yes.

2 Q. And then, in the next paragraph, in 73, you say  
3 (as read):

4           However, the specification provides  
5           essentially no explanation as to what constitutes  
6           a, quote, foreground activity.

7           Do you see that?

8 A. Yes.

9 Q. Foreground activity is not a claim term of claim 1  
10 of the '541 patent, right?

11 A. No.

12 Q. Is it a claim term in any of the claims that  
13 you've been opining on?

14 A. No.

15 Q. In paragraph 73, in the first sentence, why do you  
16 have quotes over foreground, the word "foreground" alone?

17 A. To call attention to it, and also it is a word  
18 that's in the patent.

19 Q. Is the word "foreground" in claim 1 of the '541  
20 patent?

21 A. I think you already asked me that, and we agreed  
22 that it's not.

23 Q. I think I asked you about foreground activity.  
24 And you agreed that it was not. And so my second question  
25 was just the word "foreground."

1 A. I don't see it in claim 1. No.

2 Q. And then, at the first sentence of paragraph 72,  
3 you do the same thing, right? You put quotes over --  
4 around the word background, when you say background  
5 activities. What -- why are you putting quotes around  
6 background?

7 A. To call attention to it, and in this case, it's  
8 also both in the patent and also in the claim.

9 Q. But the claim term is background activity, right?

10 A. Sure.

11 Q. So why would you just put quotes around the word  
12 background and not the whole phrase?

13 A. Because I'm talking about plural. So I'm not -- I  
14 wouldn't want to put, quote, background activities, plural.  
15 So I'm just calling out them, talking about background as a  
16 word.

17 Q. All right. And this may not be what you're  
18 referring to, but it reminded me of it. But if we come  
19 across some what you testified earlier this morning,  
20 Dr. Turnbull about the correction or the quotes, could you  
21 let me know? Have we come across it yet?

22 A. No. I don't think so. But I think it was very  
23 much along the same lines of what we're discussing here.

24 Q. Okay. And then, in paragraph 73, you have a  
25 quote, a block quote, right, from the '541 patent from

1 column 107. Do you see that?

2 A. I do.

3 Q. And this paragraph, it doesn't use the phrase,  
4 quote, background activity or the phrase, quote, foreground  
5 activity. Right?

6 A. That's right. It has background and foreground in  
7 this paragraph.

8 Q. Yeah. And it includes the phrase "foreground of  
9 user interaction" or "in the background of user  
10 interaction." Do you see that?

11 A. I do. We've got that marked in bold here.

12 Q. Is that language in claim 1 of the '541 patent  
13 foreground of user interaction or background of user  
14 interaction?

15 A. No.

16 Q. Okay. In paragraph 74, you start to say,  
17 compounding the confusion, claim 6 of the '613 patent --  
18 dot, dot, dot.

19 Do you see that?

20 A. I do.

21 Q. And is this intended to support your  
22 indefiniteness opinions for all three terms in section B?

23 A. Yes.

24 Q. Okay. My question for you is, how can a dependent  
25 claim, claim 6 of the '61 [sic] patent, support

1 indefiniteness of a different claim, claim 1 of the '541  
2 patent?

3 A. Because they're all discussing the same concept of  
4 which we referred to earlier, this idea of something in the  
5 background or a background activity.

6 Q. Do you know if that's legally proper?

7 ATTORNEY VINCENT: Object to form.

8 THE WITNESS: I -- I'm not sure I even understand  
9 the question, so that probably means it's a legal question.

10 BY ATTORNEY WANG:

11 Q. Have you ever heard of a claim being found  
12 indefinite because of a depending claim of another patent?

13 ATTORNEY VINCENT: Object to form.

14 THE WITNESS: I just don't know the case law  
15 related to that. I think why I have all this here together  
16 is I'm trying to look for help within the patent, whether  
17 it's the written description or the claims, to try to  
18 understand what these terms that, you know, in my opinion,  
19 are indefinite are, and I'm struggling to try to find that.  
20 So I'm referring to things in here, whether it's in claim 1  
21 of either patent or in claim 6 of the '613, to try to  
22 understand that.

23 BY ATTORNEY WANG:

24 Q. Right. But you say "compounding the confusion."  
25 So you seem to be saying this makes it more confusing or

1 more ambiguous.

2 I'm just trying to understand, you know, if a  
3 person of skill in the art is looking at the '541 patent  
4 and looking at claim 1, would they really be looking at  
5 other patents and other claims, dependent claims of other  
6 patents, as part of what they're looking at?

7 A. They certainly could be looking at other patents.

8 That's too broad to understand the possibilities of what  
9 everyone could do. But as we've noted, I guess, at least a  
10 couple times today, both the '541 and the '613 essentially  
11 have the same written description. So I would be looking  
12 at that and trying to assume that they're part of the same  
13 family.

14 And, again, when you just don't have anything  
15 that's definitive to help with these, you're trying to look  
16 for any help you can get. And I looked at claim 6, that's  
17 one of claims in contention, for claim construction. And  
18 in looking at it, it doesn't help. It -- like I say here,  
19 it kind of compounds or adds to the confusion because it's  
20 not specific. It doesn't help any. If anything, it makes  
21 it worse in trying to understand what the claim terms mean.

22 Q. Is there any claim differentiation issue between  
23 claim 1 of the '541 patent and claim 6 of the '613 patent?

24 ATTORNEY VINCENT: Object to form.

25 THE WITNESS: I'm not sure I understand the

1 question. But I think the answer would be something that I  
2 have here in paragraph 74, right there in the middle. I  
3 have been informed that, through a doctrine called claim  
4 differentiation, independent claims are assumed to have a  
5 broader scope than the dependent claims.

6 And then I can read the rest of it, but that's  
7 essentially what I was trying to do here based on that  
8 understanding.

9 BY ATTORNEY WANG:

10 Q. Right.

11 But claim 6 of the '613 patent is not a dependent  
12 claim from --

13 (Clarification by the certified stenographer.)

14 BY ATTORNEY WANG:

15 Q. But claim 6 of the '613 patent is not a dependent  
16 claim from claim 1 of the '541 patent, correct?

17 A. No.

18 Q. And so there wouldn't be any presumption of claim  
19 differentiation between those two claims.

20 A. I think that's a legal opinion or a legal  
21 conclusion. All I'm saying is that this claim 6 has this  
22 term in it. I'm trying to understand it. The '541 and  
23 the '613 share the same specification. So when I'm left  
24 with so little information to definitively understand the  
25 claim term, I'm looking for anything that can help, and

1 that's why they're all in this section together.

2 Q. You mentioned earlier, Dr. Turnbull, that you  
3 looked through the list of references cited for the '541  
4 and the '613 patents?

5 A. Yeah. I'm sure I reviewed some of them or at  
6 least looked at -- you know, there's columns and columns of  
7 information, but I'm sure I looked at them. Yes.

8 Q. Okay. But you don't recall any specific reference  
9 that you analyzed?

10 A. No. Not specifically.

11 Q. And you don't rely on them in your claim  
12 construction opinions, do you?

13 A. Not per se. Like I said, I remembered one  
14 article, so the reliance was something like that article  
15 would just be part of the accumulated skills and experience  
16 that I have in trying to use all the things that I've read  
17 or programmed or worked on or discussed with people in my  
18 whole career to try to inform understanding of what these  
19 claim terms mean. And some of those references -- again,  
20 that one paper I think I mentioned specifically could be  
21 part of that.

22 Q. But we would have no idea like what that paper is  
23 or what part of your opinions it relates to, right?

24 A. Oh, well, I can tell you right now. I can just  
25 scroll to page 1 of the '541 patent.

1 Q. Okay.

2 A. And I see the one that rings a bell right there.  
3 It's the Rao paper. I think there's some guides from  
4 maybe -- I don't remember specifically -- maybe New York  
5 City University. And, again, it's talking about  
6 location-based services or LBS. I think it's one of the  
7 earlier papers that does that.

8 But I think it would be really, really quite a  
9 task for me to try to think of every document or thing that  
10 I've read or reviewed or, you know, seen a presentation of  
11 that would inform my opinion. It would be thousands and  
12 thousands of documents. So it might be unreasonable for me  
13 to try to include that as things that inform my opinion.

14 Q. Okay. Can you point me to what you were talking  
15 about? You went kind of fast.

16 A. Oh, I'm sorry. I hope I didn't go too fast for  
17 Julie as well.

18 Yeah. On page 1 of the '541 patent, there's a  
19 list in the second column called other publications. And I  
20 recognized one. I guess it's the one right before it says  
21 continued. It's authored by Rao, R-a-o. And I just  
22 remember the paper. Evolution of mobile location-based  
23 services.

24 Q. And do you -- do you know the author?  
25 A. If I do, I -- you know, it was passing

1 conversation at a conference or something like that. It's  
2 an article in the communications of the ACM, which, I  
3 guess, is probably the premier journal of computer science.  
4 I've had an article in that myself maybe a couple years  
5 before this.

6 Q. And looking at this paper, can you point me to any  
7 part of your opinions that it would be relevant to or that  
8 informed any specific part?

9 A. No. Again, I'm not sure I even went to go look at  
10 it. I just remember the paper. I probably have it  
11 somewhere in my digital library. But it's just one of many  
12 things that, over my career, I would have read because I'm  
13 curious, and that's my area of research that would just be  
14 part of something that informed my opinions.

15 Again, I've probably read thousands of documents,  
16 whether it's academic papers, textbooks, again, conference  
17 presentations, programming books, that all informed my  
18 opinion.

19 Q. Have you reviewed any -- are you familiar with the  
20 Rao patent or patent with Rao?

21 A. No. I'm not familiar with anything else by the  
22 author off the top of my head. I think there's a couple of  
23 people, as you might guess, named Rao that are computer  
24 scientists. This is not Romana Rao, who I think I went to  
25 school with at Georgia Tech. So there's even a difference

1 there.

2 Q. Right. And when I say a "Rao" patent, I don't  
3 know if it's the same person or not.

4 My question was, do you recall a patent, you know,  
5 with an inventor named Rao?

6 A. No. I don't. Not off the top of my head.

7 Q. Okay.

8 Let's turn to the third term that's in claim 6 of  
9 the '613 patent. Do you see that?

10 (Clarification by the certified stenographer.)

11 THE WITNESS: Pardon me. I was clearing my  
12 throat.

13 Do you mean the third element that I have in my  
14 heading level B? Is that what you're referring to?

15 BY ATTORNEY WANG:

16 Q. Yes, yes. The user of the device.

17 A. Okay.

18 Q. That term. It's in claim 6 of the '613 patent.

19 Do you see that?

20 A. Yes.

21 Q. Earlier, you mentioned a claim construction order  
22 that you reviewed. Do you remember anything about the  
23 claim construction order?

24 A. Not specifically. I think, maybe vaguely, Judge  
25 Payne decided to work with plain and ordinary meaning.

1 That may be about all I recall off the top of my head.

2 Q. Do you remember what the terms was about or what

3 it might be relevant to?

4 A. No. I just didn't memorize that.

5 Q. Okay. So does that cause you to change any

6 opinions or want to offer any additional opinions?

7 A. If you want, you could -- you could, you know, put

8 it up, and we can look at it. I would say I recall that I

9 think that Judge Payne decided to use plain and ordinary

10 meaning. And then I think another thing that stands out is

11 that was via Samsung; is that correct?

12 Q. It may well be.

13 A. Oh. That Samsung -- I don't think they used an

14 expert in their brief related to claim construction. And

15 so it strikes me -- not that I think I should be involved

16 in everything or that everything should have an expert, but

17 I bet it would have made a difference if there was an

18 expert declaration to help establish why the claim term

19 might need some help defining it. And I don't think there

20 was one that Judge Payne had available to make his

21 decision.

22 Q. I'm just trying -- and I don't -- if you don't

23 have any opinions, I'm not asking you to speculate. But

24 I'm just trying to understand, you know, the relevance of

25 you looking at that order or if you formed any opinions

1 that -- if you formed any opinions based on that. And can  
2 you say anything beyond what you've said? You remember it  
3 was Judge Payne order. He said plain and ordinary meaning.

4 Do you even remember what term it was about?

5 A. Off the top of my head, I just don't. I just read  
6 too many things recently to remember that. I hope we're  
7 referring to the same one, in fact.

8 Q. Okay. And the order that you're referring to --  
9 strike that.

10 You just said that your recollection was that  
11 Samsung or the party did not submit an expert declaration,  
12 right?

13 A. That's right.

14 Q. And so were there disagreements with Judge Payne's  
15 order that you had or his findings or reasoning?

16 A. I don't think I have anything else to say that I  
17 already haven't. Again, the lack of an expert, I think,  
18 you know, doesn't give someone, you know, a full expert  
19 opinion about the aspect, and it's disappointing that that  
20 wasn't available to make Judge Payne's decision more  
21 informed.

22 Q. Can you think of anything that Judge Payne got  
23 wrong or that you disagree with?

24 ATTORNEY VINCENT: Object to form.

25 THE WITNESS: I just don't recall looking at it.

1 BY ATTORNEY WANG:

2 Q. And throughout -- of all the terms that you  
3 discuss in your declaration that -- and we've talked about  
4 most of them -- do you remember if Judge Payne's order  
5 relates to any of them or which ones it relates to?

6 A. No. I just didn't memorize it. Again, if you  
7 want me to look at it, we can look at it and see if we have  
8 some matches here. I'm guessing there's an overlap because  
9 that's why I was asked to look at it.

10 Q. You were asked by counsel to look at it?

11 A. Yeah.

12 ATTORNEY WANG: Let's go off the record.

13 ATTORNEY VINCENT: Okay.

14 THE VIDEOGRAPHER: The time is now 12:14 p.m.

15 We're going off the video record.

16 (Lunch recess taken.)

17 THE VIDEOGRAPHER: The time is now 12:49 p.m., and  
18 we're back on the video record. Thank you.

19 BY ATTORNEY WANG:

20 Q. Welcome back, Dr. Turnbull.

21 A. Thank you.

22 Q. Did you have a nice lunch break?

23 A. I guess so. How about you?

24 Q. I just had a bagel in my office, but not bad.

25 Did you have discussions with your counsel during

1 the break?

2 A. No.

3 Q. Let's turn back to the heading -- your heading B

4 of the declaration on page 22.

5 A. Okay. I'm with you.

6 Q. And I want to ask you about the last term. I

7 think that's what we were discussing before the break --

8 which says (as read):

9           The user of the device is directly interacting

10           with that application or perceiving any benefit

11           from that application.

12           Do you see that?

13 A. Yes.

14 Q. And that's in dependent claim 6 of the '613

15 patent, right?

16 A. At least in that. Yes.

17 Q. But here, that's the only term that -- that's the

18 only claim that you list here, right? So as far as we

19 know, it doesn't pertain to other claims.

20 A. No. That's what we're discussing here.

21           ATTORNEY VINCENT: Sorry. I object to the form on

22 that question.

23 BY ATTORNEY WANG:

24 Q. So it may be helpful to take a look at the '613

25 patent that's Exhibit 4 that we introduced.

1 A. I've got it here, and I'm on the page column  
2 of Exhibit 4 with claim 6 on it.

3 Q. Okay. And so that -- that just says that the --  
4 this -- the claim, right? The claim term, it comes from  
5 claim 6. And it says (as read):

6       Wherein the one or more processors are  
7       configured to classify -- dot, dot, dot.

8       And then (as read):

9       When the user of the device is directly  
10      interacting with that application or perceiving  
11      any benefit from that application.

12      Do you see that?

13 A. That's right. I do see that.

14 Q. And the term is the -- really, the last clause of  
15 claim 6.

16 A. Yes.

17 Q. Okay. Now, let's focus on the term -- now that  
18 we've seen the context, the term that you've identified.

19 And I just want to focus on the first part of it. It says  
20 (as read):

21       The user of the device is directly interacting  
22       with that application.

23       Do you see that?

24 A. I do.

25 Q. All right. You don't have an opinion that that

1 term is indefinite, correct?

2 A. I'm -- I think that's what I'm referring to in  
3 that subsection B, if that's what your question is. Maybe  
4 I don't understand the question.

5 Q. No. So I want to focus on this term that you've  
6 identified for construction, and I understand you have an  
7 indefiniteness opinion, but I just want to understand where  
8 your argument is.

9 And the first part of the term, it says (as read):

10 The user of the device is directly interacting  
11 with that application.

12 Do you see that?

13 A. Yes.

14 Q. And then it says (as read):

15 Or perceiving any benefit from the  
16 application.

17 Right?

18 A. That's right. That whole phrase.

19 Q. Yeah. So let's ignore the "or perceiving any  
20 benefit from the application." Let's put that aside for  
21 now.

22 My question is, do you have any opinion that the  
23 first part of that term is indefinite?

24 A. Yeah. That's kind of what this whole section is  
25 about. I'm talking about this is related to background and

1 foreground again. And directly interacting leads into that  
2 or is informed by that as well.

3 So I think of that whole phrase in the claim as  
4 something that I'm saying is indefinite.

5 Q. Okay. So, Dr. Turnbull, take a look at  
6 paragraph 82 of your declaration.

7 A. Okay.

8 Q. Okay. So here you say (as read):

9 Finally, claim 6 of the '613 patent is, in my  
10 opinion, indefinite because it relies on a user's  
11 subjective experience.

12 Do you see that?

13 A. Yes.

14 Q. In this paragraph 82 and 83, you're talking about  
15 the language "perceives any benefit," right?

16 A. That's right. Or just benefit, even. Yes.

17 Q. Or benefit. Okay. So I understand that you have  
18 an argument for that.

19 But my question is -- for the first part of the  
20 term where it just says (as read):

21 User -- user of the device is directly  
22 interacting with that application.

23 I want to focus you on that part.

24 Do you have any opinion or argument that that is  
25 indefinite?

1 A. Yes. I think that's just a couple paragraphs

2 above. Let me see here.

3 I -- I mention that whole phrase starting -- or at

4 least in one place in paragraph 74, and I mention that --

5 the middle sentence there, I say in paragraph 74, for

6 instance, this suggests there is some other way a user can

7 be indirectly interacting with an application.

8 And then, in the next paragraph, I'm talking,

9 again, about a user directly interacting with the

10 application, and I think that follows for a couple more

11 paragraphs.

12 So I think all of that is discussing what you just

13 asked about.

14 Q. So the way that I read your opinions was that you

15 were relying on claim 6 to make an argument about claim 1,

16 about the term that appears in claim 1, but I did not

17 see -- and maybe you can point me to something specific

18 that, you know, argues that the term that you've identified

19 in claim 6, the first part of it, the user of the device is

20 directly interacting with that application, is indefinite.

21 A. Yeah. Maybe we're just not syncing up here. I

22 feel like that is what I read out and I'm discussing in

23 paragraph 74, 75, and so on. I'm discussing that

24 specifically.

25 Q. Okay. So in paragraph 74, you're talking about

1 claim differentiation. And then saying something about  
2 claim 1, right? You're saying that this creates  
3 uncertainty about interacting with the user as recited in  
4 independent claim 1.

5 Do you see that?

6 A. I do.

7 Q. Okay. So what about that says that the part of  
8 claim 6 is indefinite?

9 A. Because I'm talking about claim 6. At the  
10 beginning, I'm trying to understand, and claim 6 adds to  
11 the confusion so it doesn't help. Claim 6, therefore, is  
12 indefinite as well. And then that's where I go on for a  
13 couple of paragraphs -- or three or four paragraphs, in  
14 fact, discussing that.

15 Q. So is it the part of claim 6 that says interacting  
16 with the user in the user device interface foreground?

17 A. I'm mostly focused on what, again, I have detailed  
18 in quotes and that heading B but also, here, what I have in  
19 bold. So it's the latter part. So if you were to continue  
20 reading, that's what I'm discussing.

21 (As read):

22 The user of the device is directly interacting  
23 with that application or perceiving any benefit  
24 from that application.

25 Q. Yeah. The way that I read your opinions,

1 Dr. Turnbull, was that you understood what directly  
2 interacting means, but you just -- you raised some argument  
3 about what interacting means or how that scope is affected  
4 in view of claim 6.

5 But maybe you can just articulate to me what's  
6 allegedly ambiguous or indefinite about directly -- user is  
7 directly interacting with that application.

8 A. I think it's kind of succinct right there, at  
9 least beginning in paragraph 74. I think that's what I  
10 just read. I say, again, more to the ambiguity or the  
11 indefiniteness. For instance, this suggests that there is  
12 some other way a user can be indirectly interacting with an  
13 application without the user perceiving a benefit. So it  
14 doesn't -- we have this alternative, so it's not really  
15 specific.

16 Then, again, I go on and discuss some various  
17 other arguments as well that are my opinion about this idea  
18 of the user of the device is directly interacting with that  
19 application or perceiving any benefit from that  
20 application. So I feel like this whole section discusses  
21 that.

22 Q. For claim 1, you're raising the argument  
23 "indirectly interacting." But when -- the language I'm  
24 asking you about is "directly interacting." I don't  
25 believe you have any such argument for directly interacting

1 for claim 6 in your report. And if you could point me to  
2 it.

3 A. Again, I think that's what this whole section  
4 includes. I'm talking about directly interacting in quotes  
5 in paragraph 75. That's from claim 6. That's what's  
6 there.

7 So maybe I just don't understand the question, or  
8 it's some rhetorical point or something I'm not  
9 understanding.

10 Q. Okay. In claim 75 [sic], I don't see any opinion  
11 about directly interacting being indefinite. I think, if  
12 anything, it suggests that there is some explanation for  
13 that. So I'm not seeing it in paragraph 75.

14 A. I feel like it's there. I'm discussing it. I'm  
15 trying to make sense of it. And in trying to make sense of  
16 it, the idea is that -- try to make sense of it is because  
17 it's not definite. So that's why I'm looking at things in  
18 the patent to try to understand it. And, again, continue  
19 into other paragraphs as well.

20 Q. Okay. I'm not seeing it in the your report, but  
21 maybe let me just ask you. What is indefinite about the  
22 first part of that language?

23 (As read):

24 The user device is directly interacting with  
25 that application.

1 Explain to me why that's allegedly indefinite.

2 A. We don't understand the full breadth of it, and  
3 that's what I discuss here in the subsequent paragraphs.

4 Q. Can you give me an example of what would not be  
5 understood?

6 A. Well, like I read now -- I'll read it for the  
7 third time -- in paragraph 74, for instance, this suggests  
8 there is some other way that a user can be indirectly  
9 interacting with an application without the user perceiving  
10 a benefit from that application. So we don't really  
11 understand directly definitively, and then there's this  
12 contrast in, is there something that's not that or is that  
13 everything. And then me trying to parse through that,  
14 either explaining using examples or discussing what I think  
15 that might mean in terms of directly, indirectly, related  
16 to, say, foreground and background as well. I feel like  
17 that's what this whole section is about.

18 Q. Okay. So then there's the -- a separate phrase at  
19 the end (as read):

20 Or perceiving any benefit from that  
21 application.

22 And so I understand that you have an opinion for  
23 that. I was trying to focus you on the first part. But I  
24 heard in your answer you refer back to that language,  
25 "perceiving any benefit from."

1           So is that the basis of your indefiniteness

2   opinion?

3   A.    That's in here, too, later on. But I'd say all  
4   these paragraphs are part of my analysis and my opinion and  
5   my attempt to understand based on what's in the patents  
6   themselves, what the claim language means.

7   Q.    Let me ask you about the language of the second  
8   term in claim 1.

9   A.    Okay.

10   Q.    Can you read the second term you have in the  
11   heading of B, the one that's in '613 patent, claim 1.

12   A.    Sure. It's (as read):

13           Classify whether a particular application  
14   capable of both interacting with the user in a  
15   user interface foreground of the device and at  
16   least some internet service activities when not  
17   interacting with the user in the device user  
18   interface foreground is interacting with the user  
19   in the device user interface foreground.

20   Q.    Okay. I want to focus you on the middle part of  
21   that term that you just read. And it says (as read):

22           Application capable of both interacting with  
23   the user in a user interface foreground of the  
24   device and at least some internet service  
25   activities when not interacting with the user in

1 the user device foreground.

2 Do you see that?

3 A. I do.

4 Q. Do you understand that that whole phrase I just  
5 read is a noun?

6 ATTORNEY VINCENT: Object to form.

7 THE WITNESS: I just don't think of it that way.

8 It's a phrase.

9 BY ATTORNEY WANG:

10 Q. But it's talking about like an application capable  
11 of some functionality, but it's -- the whole thing is  
12 talking about the application, right?

13 A. Yeah. I'll agree it's trying to describe a  
14 particular application. Yes.

15 Q. Okay. And so do you offer any opinion that  
16 that -- what I've called a noun is indefinite?

17 ATTORNEY VINCENT: Object to form.

18 THE WITNESS: I guess the whole phrase to me is  
19 indefinite. Even adding that on doesn't help define it  
20 specifically.

21 BY ATTORNEY WANG:

22 Q. What do you mean, adding the whole phrase?

23 A. Well, I'm not going to -- I'm -- didn't claim that  
24 I'm saying that the word "application" is indefinite. I'm  
25 saying that -- for example, I'm saying the whole phrase,

1 that part of the claim, that claim language is indefinite.  
2 Q. I understand. Yeah. Your opinion is you have  
3 this indefiniteness argument for the whole claim term,  
4 which, you know -- at the end, if we look back at heading  
5 B, right, there's the end, which is, is interacting with  
6 the user in the user device foreground.

7 Do you see that?

8 A. In the device user interface foreground, yes.

9 Q. Yes. Okay.

10 So I see that that last part is an action or a  
11 verb.

12 Do you agree with that?

13 ATTORNEY VINCENT: Object to form.

14 THE WITNESS: It's just a modifier. It just is  
15 part of the phrase itself. I'm really not thinking about  
16 whole phrases.

17 BY ATTORNEY WANG:

18 Q. The beginning part is, classify whether a  
19 particular application, you know, dot, dot, dot, is  
20 interacting with the user, right? So it's talking about  
21 classifying whether an application is doing this, right?

22 A. Yes.

23 Q. Okay. So I'm not asking about that right now.

24 I'm not. I'm asking you about the middle part, right,  
25 where it says, an application capable of, and I suggested

1 that this could be considered a verb, you know, a type of  
2 application. I'm sorry. I suggested it could be a noun.  
3 A type of application that has this property. Do you see  
4 that, "capable of"?

5 ATTORNEY VINCENT: Object to form.

6 THE WITNESS: I do see that. I think I'm still  
7 just not following you. Maybe you -- we're both -- you're  
8 thinking about the individual words. I'm thinking about  
9 what the phrase means, what the phrase means in the context  
10 of the rest of the claim, the whole patent, both in my  
11 opinion and from a person of skill, and, I mean, maybe even  
12 our difficulty understanding each other here is some  
13 indication that it's an indefinite claim term or it doesn't  
14 help any.

15 BY ATTORNEY WANG:

16 Q. I don't think it does, Doctor.

17 But -- so I'm asking you about that application.

18 An application -- let me read it again. Okay? (As read):

19 An application capable of both interacting  
20 with the user in a user interface foreground of  
21 the device and at least some internet service  
22 activities when not interacting with the user in  
23 the user device interface foreground, period.

24 Okay. That's talking about an application or a  
25 type of application. Do you have an opinion that that's

1 indefinite?

2 A. Yeah. I feel like that's still indefinite. And

3 part of that is both, A, I'm talking about that whole

4 phrase, so I don't think about each of these elements

5 individually, or I would have just talked about them

6 specifically individually, but also because we have the

7 discussion that we talked about earlier. And it's also in

8 other paragraphs in my report in this section, about what

9 foreground means and a little bit about what even

10 interacting means. So I don't really draw any distinction

11 in trying to parse out one word or two words in this phrase

12 is somehow different than my overall opinion.

13 Q. Okay. And where can you point me in your report

14 to why the -- what I call a noun or that type of

15 application is indefinite?

16 A. I think this whole section -- I mean, it's not

17 many paragraphs -- discusses it in various ways, whether

18 we're talking about applications, what activities are, and

19 then, of course, the foreground and background issue as

20 well. So it's just all in this section. So the entirety

21 of this section covers that.

22 Q. Can you be more specific on pointing me to a

23 specific paragraph or part of it, because I'm not seeing

24 it.

25 A. I feel like this entire section discusses these

1 issues. I don't know how to be more clear about it. I  
2 think I put a lot of effort into writing this part and  
3 trying to explain my opinions and the issues related to the  
4 claim terms. I don't really have anything else to add off  
5 the top of my head.

6 Q. Okay. Let's look at the last part of this term.

7 It says (as read):

8 Is interacting with the user in the device  
9 user interface foreground.

10 Do you see that?

11 A. Yeah. After the comma, I guess.

12 Q. Yes.

13 The user is the user of the wireless end-user  
14 device, right?

15 A. I assume so.

16 Q. Look at the term "device user interface  
17 foreground." Do you see that at the end?

18 A. Yes.

19 Q. Is that a technical term of art? Device user  
20 interface --

21 A. I don't think of it as a common term of art. I  
22 don't think people use that just chatting about building  
23 software. No.

24 Q. Do you have any opinions that this is an unknown  
25 term to a person skilled in the art, device user interface

1 foreground?

2 A. I'm not sure I have a distinction between it being  
3 unknown and it being indefinite as I detail in my  
4 discussion after that. If -- I don't know if you're asking  
5 for a difference between those two words, indefinite versus  
6 unknown.

7 Q. I'm asking you -- unknown, like it would be a term  
8 unfamiliar to a POSITA.

9 A. It's certainly not a common term.

10 Q. But you're not saying it would be unknown or  
11 unfamiliar --

12 ATTORNEY VINCENT: Object --

13 (Clarification by the certified stenographer.)

14 ATTORNEY VINCENT: Object to form.

15 You can answer.

16 THE WITNESS: If you'll just ask me again. That  
17 way I make sure I get it right.

18 BY ATTORNEY WANG:

19 Q. Sure. It's -- let me look.

20 But you are not saying that it would be unknown or  
21 unfamiliar to a POSITA.

22 ATTORNEY VINCENT: Object to form.

23 THE WITNESS: I think that's what I am -- I am  
24 saying. I'm not sure I even understand the full breadth of  
25 what that means. Like has that phrase never been used

1 before? Is that what you mean by unknown? I'm not sure  
2 I've seen it in -- anywhere else. It's -- it's vague. I  
3 don't think that's -- it's a common term to a person of  
4 skill. So, I guess, because it is vague and, as I've said  
5 here, it's indefinite. It's certainly not anything that's  
6 familiar to me.

7 BY ATTORNEY WANG:

8 Q. You're saying user interface foreground is not  
9 familiar to you?

10 ATTORNEY VINCENT: Object to form.

11 THE WITNESS: It's -- it's not a term or phrase  
12 that I think I've ever used. We were also, I think,  
13 talking about device user interface foreground as well.

14 BY ATTORNEY WANG:

15 Q. So your opinion is that both of them are not  
16 familiar phrases, device user interface foreground, or user  
17 interface foreground?

18 ATTORNEY VINCENT: Object to form.

19 THE WITNESS: Yeah. They're certainly not common  
20 terms.

21 BY ATTORNEY WANG:

22 Q. Do you cite any evidence for this idea that  
23 they're uncommon or unknown?

24 A. I guess maybe we're back to two issues there.  
25 Like I'm trying to prove an negative. Like I didn't go

1 analyze the entire internet and every paper I've ever read  
2 to see if that phrase is in there. But at the same time, I  
3 have read a lot of things, and I'm familiar with doing  
4 this, and I understand a person of skill. I exceed that.  
5 And it's certainly not a common term to me.

6 Q. Have you looked at the many references that  
7 discuss background or foreground cited on the face of these  
8 patents?

9 ATTORNEY VINCENT: Object to form.

10 THE WITNESS: I don't know what those references  
11 are. You'd have to show me what they are.

12 BY ATTORNEY WANG:

13 Q. Did you do that analysis? Did you look at the  
14 titles of the patents cited on the face of the '541 or '613  
15 patents?

16 A. Are you asking if I looked at the titles of all of  
17 the references cited and noticed if they use in their  
18 titles the word "background" or "foreground"?

19 Q. Yes.

20 A. If I did that, I don't recall doing that. It's  
21 possible that I looked at some of them, but sitting here  
22 today, I just don't have a memory of doing that very  
23 specific task.

24 Q. Okay. So before, you referred to your background  
25 as a person of skill. So apart from your background and

1 knowledge, do you cite any other evidence that supports the  
2 term user device foreground -- sorry -- "user interface  
3 foreground" or "device user interface foreground" being  
4 uncommon or unknown?

5 A. I think the fact that I'm claiming in this report  
6 that it's part of an indefinite phrase and devote several  
7 paragraphs to discussing the concept of foreground and, I  
8 guess, alternatively, background, and that's based on my  
9 own skills and experience, that kind of by definition I'm  
10 saying that they're not common terms.

11 And, again, all of the things that I've read over  
12 my history in building applications, computer science,  
13 architectures, and understanding things like that, that's  
14 what this is all based on. Simple as that, at least.

15 Q. Doctor, when we were looking at your CV, we talked  
16 about the Headwater case, the last one that appears in your  
17 CV. Do you recall that?

18 A. I do.

19 Q. Okay. Do you recall how many terms you offered  
20 opinions on?

21 A. Not off the top of my head. No.

22 Q. Does seven sound correct?

23 A. I would think that's in the ballpark.

24 Q. And do you know if any of those terms were found  
25 to be indefinite by the court?

1 A. I don't know. I'm not sure that's even been  
2 decided yet. I just don't recall.

3 ATTORNEY WANG: Let's look at another exhibit.

4 THE WITNESS: All right. It looks like you  
5 labeled this as Exhibit 5.

6 ATTORNEY WANG: Yes --

7 THE WITNESS: And I've got it open.

8 ATTORNEY WANG: Okay. I'm introducing as  
9 Exhibit 5, a document entitled claim Construction Order.  
10 And this is case 2:23-CV-00103 in the case of Headwater  
11 versus Samsung, docket 118. And this page [sic] is 19  
12 pages long.

13 (Exhibit 5 was presented and subsequently marked  
14 for identification.)

15 THE WITNESS: Okay.

16 BY ATTORNEY WANG:

17 Q. Okay. Doctor, have you seen this document before?  
18 A. I'm not sure I have. Let me scroll to the bottom  
19 here.

20 I see that it's also an opinion that Judge Payne  
21 has signed, but I think the one we were referring to  
22 earlier had a different page count, so I don't think that's  
23 what this one is. And I, again, just don't have a memory  
24 of what the case numbers are to differentiate them.

25 Q. Okay. Let me first ask you. Is this the case

1 that you submitted a declaration in regarding claim  
2 construction?

3 A. I'm not sure. I just don't remember the number.  
4 The patent numbers look familiar there, but, you know, I  
5 see a lot of numbers.

6 Q. Maybe this would help. If you turn to page 9 of  
7 the document I just sent. Do you see there's a section on  
8 the level of ordinary skill in the art?

9 A. I do see that. Yes.

10 Q. And do you see here that -- text "Samsung  
11 asserts," and then it quotes your name.

12 Do you see that?

13 A. I do. I see it says Turnbull declaration.

14 Q. Okay. So does this refresh your recollection that  
15 this is the case that you submitted a declaration in?

16 A. I guess it must be. Again, I just don't remember  
17 the number, but I think it's the only other case related to  
18 these matters that I'm involved in. So I'm guessing that's  
19 what this is.

20 Q. Okay. I want you to look at page 2 of this  
21 document at the top of it. And in the core it says, the  
22 parties present five disputes about claim scope. And then  
23 it says --

24 A. I see that on page 2.

25 Q. Right. And it says that, for each, Samsung

1 contends the associated term is indefinite, whereas  
2 Headwater asserts that the term has an ordinary, customary  
3 meaning that should apply.

4 Do you see that?

5 A. I do.

6 Q. And then let me turn your attention to the last  
7 page. And do you see that the court has its constructions?

8 A. The last page of the entire document?

9 Q. Yes.

10 A. Oh. I do. It looks like page 19 has a heading  
11 that essentially is the first thing that says conclusion.

12 Q. Right.

13 And none of the terms are found indefinite.

14 Right?

15 A. I don't see them marked as such here.

16 Q. In all of these Headwater cases, have you ever  
17 offered an opinion other than indefiniteness?

18 A. I'm not sure. I just don't recall.

19 Q. And at least in this case, the court did not find  
20 any terms indefinite, right?

21 A. I'm not sure. When we were discussing something  
22 earlier, I thought you said that my work on what I guess is  
23 this case -- I talked about seven terms. I only see five  
24 rows here. So I don't know if there are two someplace else  
25 or I misremembered what you said or you meant something

1 else.

2 Q. Or Samsung withdrew those terms?

3 A. Oh, yes. See, I just don't know. This is the  
4 first time I've seen this document, to my memory.

5 Q. Okay. All right. So I want to be clear that you  
6 had referenced a claim construction order before, but this  
7 is not the one that you reviewed.

8 A. No. I don't think so. Because I think one of the  
9 takeaways from the other one was that Samsung didn't have  
10 an expert, and this one, as you pointed out to me -- I'm  
11 the expert.

12 Q. Right.

13 Let me also call your attention to page 14 of this  
14 order.

15 A. I'm on page 14.

16 Q. Okay. Do you see in the middle of this page the  
17 court says, this phrase is not indefinite? Do you see  
18 that?

19 A. It's at the beginning of the second full  
20 paragraph?

21 Q. Yes.

22 A. I see that sentence. Yes.

23 Q. And then it says, for one, the court agrees that  
24 Dr. Turnbull's declaration on this term is conclusory.

25 A. Okay. I see that.

1 Q. Okay.

2 All right. Let's turn back to your declaration in  
3 this case, Doctor.

4 So in this case, you're opining about four terms,  
5 and your opinion is that they're all indefinite?

6 A. That's right.

7 ATTORNEY WANG: I have no further questions. I  
8 will pass the witness.

9 EXAMINATION

10 BY ATTORNEY VINCENT:

11 Q. Just one quick question, and it relates to what we  
12 just talked about earlier on in the deposition. At least  
13 the transcript that I had, the answer was ambiguous. So I  
14 just want to clarify.

15 Apart from Exhibit 5, you did review, to prepare  
16 for your deposition, another claim construction order in  
17 another Headwater case, correct?

18 A. That's right. The one I think we referred to a  
19 couple of times today.

20 Q. The answer that you gave earlier, the way it was  
21 transcribed was ambiguous as to whether or not you had  
22 actually looked at it or not, so I just wanted to make that  
23 clear.

24 A. Oh, I apologize. I did review it.

25 ATTORNEY VINCENT: And I have no questions.

1 ATTORNEY WANG: I just have a couple follow-ups.

2 FURTHER EXAMINATION

3 BY ATTORNEY WANG:

4 Q. Do you have that available to provide or no?

5 ATTORNEY VINCENT: Object --

6 THE WITNESS: I don't. I kind of -- getting

7 everything off my screen, and I buried it. So I wouldn't,

8 you know, have anything unfair available.

9 BY ATTORNEY WANG:

10 Q. Okay. And since your counsel, you know, refreshed  
11 your recollection that you reviewed, I think I tried to  
12 understand it, if you had any opinions about it, if you  
13 want to say anything about it. And so apart from what  
14 we've discussed, is there anything that you want to say  
15 about it?

16 A. I don't think I have anything to add beyond what  
17 I've already said.

18 ATTORNEY WANG: Okay. I have nothing further.

19 ATTORNEY VINCENT: Nothing further.

20 CERTIFIED STENOGRAFHER: Robert, I'll get your  
21 transcript order on the record, please.

22 ATTORNEY VINCENT: Let's do -- what's the normal  
23 turnaround?

24 CERTIFIED STENOGRAFHER: Two weeks.

25 ATTORNEY VINCENT: That's fine.

1 CERTIFIED STENOGRAPHER: Did you want an  
2 uncertified rough transcript in the interim?

3 ATTORNEY VINCENT: Yes, please.

4 CERTIFIED STENOGRAPHER: Anything else on the  
5 record?

6 THE VIDEOGRAPHER: Did you want a copy of the  
7 video as well, Robert? I'm sorry.

8 ATTORNEY VINCENT: Yes, please. Sorry.

9 THE VIDEOGRAPHER: Okay. All right. With that,  
10 the time is -- sorry.

11 Anything else before we go off the record?

12 ATTORNEY WANG: No.

13 ATTORNEY VINCENT: Not from me.

14 ATTORNEY WANG: Not from Headwater.

15 THE VIDEOGRAPHER: All right. With that, the time  
16 is now 1:33 p.m. We're going off the video record.

17 (Proceedings concluded at 1:33 p.m. PDT.)

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1 CERTIFICATE OF REPORTER

2 ---oo---

3 I, the undersigned, a Certified Shorthand  
4 Reporter, Licensed by the State of California, being  
5 empowered to administer oaths and affirmations remotely  
6 pursuant to Section 2093(b) of the Code of Civil Procedure,  
7 do hereby certify:

8 That the foregoing proceedings were taken remotely  
9 before me at the time and place herein set forth; that any  
10 witness in the foregoing proceedings, prior to testifying,  
11 were placed under oath; that a verbatim record of the  
12 proceedings was made by me using machine shorthand which  
13 was thereafter transcribed under my direction; further,  
14 that the foregoing is an accurate transcription thereof.

15 I further certify that I am neither financially  
16 interested in the action nor a relative or employee of any  
attorney or any of the parties.

17 Further, that if the foregoing pertains to the  
18 original transcript of a deposition in a Federal Case,  
19 before completion of the proceedings, review of the  
20 transcript [ ] was [X] was not requested.

21 IN WITNESS WHEREOF, I have this date subscribed my  
22 name.

23 DATED: 9/6/2024

24

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25 JULIE RUMSEY, CSR No. 14144

## DR. DONALD TURNBULL

August 30, 2024

<b>Exhibits</b>	4:16 5:4 24:9, 11,19,22 25:2 31:11 32:3,8 45:23 46:14 4:16 24:9,11, 19,22 25:2 32:3,8	77:21 <b>11:25</b> 77:23 <b>11:32</b> 82:14 <b>11:35</b> 82:19	126:10 <b>1:33</b> 130:16,17 <b>2</b> <b>2</b> 4:11,18 24:10,13 25:11,14 26:1,17 27:20 31:11 32:4 125:20,24	85:23 105:4 <b>223-CV-00352</b> 25:17 <b>223-CV-</b> <b>00379-JRG-</b> <b>RSP</b> 24:25 <b>23</b> 43:13 44:2 45:1 46:21 88:11 91:24 <b>24</b> 4:17,20 <b>24th</b> 9:21 26:8 <b>25</b> 46:24 47:2,12 <b>26</b> 51:11,21 <b>2:23-CV-</b> <b>00103</b> 124:10 <b>2:23-CV-</b> <b>00379</b> 7:14 <b>3</b> <b>3</b> <b>4:21 59:3,7,</b> <b>11,19,23</b> <b>60:10,11 89:8</b> <b>30</b> <b>4:17 5:1 25:3,</b> <b>9 26:4</b> <b>30th</b> 5:11 <b>310 826-7474</b>
<b>Exhibit 1</b>				
<b>Exhibit 2</b>				
<b>Exhibit 3</b>				
<b>Exhibit 4</b>				
<b>Exhibit 5</b>				
'541				
---oo---				
-352				
1				
1				

## DR. DONALD TURNBULL

August 30, 2024

3:11	<b>53</b>	<b>61</b>	<b>75201-2923</b>	60:4
<b>32</b>	63:2,8	78:16 79:3	3:5	<b>99</b>
91:24	<b>541</b>	80:24 94:25	<b>78</b>	70:2
<b>36</b>	22:1 23:2	<b>613</b>	4:12	<b>9:01</b>
27:16 30:14	35:10,12,16	22:1 23:2	8	5:1
	46:14 52:7,	35:11 54:22		<b>9th</b>
	10,15,18,24	55:1,4,11		
<b>4</b>	53:3,9 57:17	59:4,15 60:5,	<b>8</b>	9:17 13:4,5
	59:4,12,22,24	7 86:7,8	4:10,11 41:24	16:22 25:9
<b>4</b>	60:11 63:10	94:17 95:21		<b>A</b>
4:22 59:3,9,	65:14 66:2,11	96:10,23		
11,14 60:2,3,	68:7 78:22	97:11,15,23		
6 105:25	79:6,21,25	98:4 101:9,18	<b>8/22/2024</b>	<b>a.m.</b>
106:2	80:2,9,18	105:14,24	4:24	5:1 40:12,15
<b>40</b>	82:3 83:9	108:9 114:11	<b>8/24/2024</b>	77:21,23
16:25 17:3	86:7 88:22	122:14	4:18	82:14,19
26:15	89:9 91:22	<b>62</b>		<b>absolute</b>
<b>41</b>	92:10,19	81:15 82:8	<b>8/9/2024</b>	49:17 50:14,
4:11,20 26:2	93:25 94:12	83:4	4:16	16,19,21
<b>43</b>	95:1 96:3,10,	<b>64</b>	<b>82</b>	51:6,10
	23 97:16,22	46:4	108:6,14	<b>absolutely</b>
	98:3,25 99:18	<b>66</b>	<b>83</b>	51:10
53:5	122:14	88:10 90:14,	108:14	<b>academic</b>
<b>44</b>	<b>58</b>	15	<b>8th</b>	33:25 35:23
53:6	65:24 66:2		13:3	36:7 100:16
<b>48</b>	70:22 76:10			<b>accessing</b>
54:23	<b>59</b>	<b>7</b>		79:8,15
<b>49</b>	4:23			<b>accompanying</b>
54:25		<b>7</b>	<b>9</b>	37:15 38:9,14
	<b>6</b>	4:5 32:9		39:24
<b>5</b>		<b>72</b>	<b>9</b>	<b>accordance</b>
		91:17 93:2	4:12 26:14	6:23
<b>5</b>	86:8 94:17,25	<b>73</b>	43:15 46:23	
4:24 124:5,9,	95:21 96:16,	92:2,15 93:24	125:6	
13 128:15	23 97:11,15,		<b>9,215,613</b>	
<b>50</b>	21 101:8,18	<b>74</b>	4:22 60:4	<b>account</b>
7:22 45:14,16	105:14 106:2,	94:16 97:2	<b>90025</b>	49:15 50:7
55:23,24	5,15 108:9	109:4,5,23,25	3:10	<b>accumulated</b>
<b>51-</b>	109:15,19	111:9 113:7	<b>90s</b>	98:15
66:11	110:8,9,10,	<b>75</b>	36:21	<b>accurate</b>
	111,15 111:4	109:23 112:5,	<b>94</b>	43:11 64:9,19
	112:1,5	10,13	4:23 59:16	

## DR. DONALD TURNBULL

August 30, 2024

<b>acknowledgin</b> 15:6	<b>addition</b> 23:4 52:21	<b>allegedly</b> 111:6 113:1	128:24	67:6 84:23 126:3
<b>ACM</b> 100:2	<b>additional</b> 20:24 39:9 55:7,14 102:6	<b>allowed</b> 85:7,9,14,17	3:1 7:23 26:20	<b>applying</b> 76:15 77:3,12 79:15 80:2, 10,19 83:24
<b>act</b> 16:2	<b>adds</b> 96:19 110:10	<b>alternative</b> 111:14	<b>appearing</b> 6:15	<b>approximate</b> 35:21
<b>acting</b> 43:17 44:11	<b>administered</b> 6:23	<b>alternatively</b> 123:8	<b>appears</b> 89:12 109:16 123:16	<b>architecture</b> 73:2 75:18
<b>action</b> 55:16,19 116:10	<b>administering</b> 6:14	<b>ambiguity</b> 111:10	<b>appended</b> 26:11	<b>architectures</b> 123:13
<b>activities</b> 65:15 66:4, 13,17 67:2,8 91:13,18,19 93:5,14 114:16,25 117:22 118:18	<b>advice</b> 11:12 12:13 41:17	<b>ambiguous</b> 90:18 96:1 111:6 128:13, 21	<b>applicable</b> 15:14 19:2	<b>area</b> 35:1 100:13
<b>activity</b> 46:13,15,16 60:16 61:6,7 65:18 67:9,19 79:8,14 86:16,20 87:14 88:22 89:1,4,11,15, 19 90:12,25 91:8,10,11,12 92:6,9,23 93:9 94:4,5 95:5	<b>affect</b> 52:23 53:8,10 87:24	<b>amended</b> 53:17,23	<b>argue</b> 55:13	
<b>add</b> 119:4 129:16	<b>affected</b> 111:3	<b>amendment</b> 54:7 55:14,15	<b>application</b> 105:10,11	<b>argues</b> 109:18
<b>added</b> 10:19 14:22 28:1	<b>afternoon</b> 17:5	<b>amendments</b> 53:11 54:16, 18	106:10,11,22 107:11,16,20	<b>argument</b> 107:8 108:18, 24 109:15 111:2,22,25 116:3
<b>adding</b> 115:19,22	<b>agree</b> 6:12 12:19,25 21:12,13 32:4 49:7,14,25 50:10,21 70:11 71:10 77:2 79:12 80:9,18 85:2 115:13 116:12	<b>America</b> 28:6	108:22 109:7, 10,20 110:23, 24 111:7,13, 19,20 112:25 113:9,10,21 114:13,22 115:10,12,14, 24 116:19,21, 25 117:2,3, 17,18,19,24, 25 118:15	<b>arguments</b> 111:17
	<b>agreed</b> 21:9 92:21,24	<b>analyze</b> 114:4 122:13	<b>applications</b> 118:18 123:12	<b>art</b> 37:20 38:14, 20 39:3,5,9, 16 69:12 89:20,25 90:4,11 91:2 96:3 119:19, 21,25 125:8
	<b>agrees</b> 127:23	<b>analyzed</b> 42:10 48:9 98:9	<b>applied</b> 44:18 47:5 48:3 84:9 85:13	<b>article</b> 98:14 100:2,4
	<b>ahead</b> 11:17 23:25 27:25 59:4	<b>Angeles</b> 3:10 5:13	<b>anyplace</b> 39:25	<b>articulate</b> 111:5
			<b>apply</b> 12:23 19:3	<b>asks</b>

## DR. DONALD TURNBULL

August 30, 2024

21:2	17 29:15	14,18,21	116:4 121:24	<b>bear</b>
<b>aspect</b>	30:11 37:7,11	122:9,12	128:2	31:17
48:1 84:2	40:5,8,10,17,	124:3,6,8,16	<b>background</b>	<b>begin</b>
103:19	22 41:1,3,7,	128:7,10,25	9:16 38:21,24	88:14
<b>aspects</b>	10,11,15,19	129:1,3,5,9,	39:11,21,22	<b>beginning</b>
15:15	42:18 43:1,4,	18,19,22,25	46:15,16	5:4 16:13
	7,12,24 45:6,	130:3,8,12,	79:7,14	57:19 68:6
<b>asserted</b>	9 47:1 48:4,	13,14	86:16,19	110:10 111:9
22:8,9,10,17	13,16,18		87:13 88:17,	116:18
35:4	49:9,13,18,24	<b>attorney-client</b>	22 89:1,3,6,	127:19
<b>asserts</b>	50:1,4,8,9,23	11:1	11,14,17,19	<b>begins</b>
125:11 126:2	51:2,19,22,25		90:12,22,24,	24:18 61:6
	52:2 56:10,14	<b>August</b>	25 91:9,11,18	<b>behalf</b>
<b>assume</b>	58:8,10,14,	3:9 5:1,11,20	93:4,6,9,12,	5:12,23 9:5,8
8:4 96:12	17,22 59:2,17	9:17,21 13:3,	14,15 94:4,6,	13:2 19:16
119:15	64:7,11 65:1,	4,5 16:22	9,13 95:5	25:6
<b>assumed</b>	4,20,21	25:9 26:8	107:25	<b>bell</b>
97:4	66:18,21,25		113:16	28:17 30:25
	67:4,12,15	<b>author</b>	118:19 122:7,	34:1,25 36:9
<b>attached</b>	70:14 76:20,	99:24 100:22	18,24,25	99:2
25:24	23 77:1,5,10,	<b>authored</b>	123:8	<b>benefit</b>
<b>Attachment</b>	19 78:1,5,8,	99:21		105:10
4:19	11,13 79:1,	<b>AVE</b>	<b>backward</b>	106:11
	17,19,22,24	3:5	46:13	107:15,20
<b>attempt</b>	80:4,6,11,14,	<b>aware</b>	<b>bad</b>	108:15,16,17
75:3 114:5	21,23 82:2,4,	8:22 9:1 10:3,	104:24	110:23
<b>attention</b>	12,13,18,22	8 13:25	<b>bagel</b>	111:13,19
34:10 45:14	83:12,15		104:24	113:10,20,25
60:13 65:13	84:6,10	<b>B</b>	<b>ballpark</b>	<b>bet</b>
92:17 93:7	86:14,17		65:12 123:23	102:17
126:6 127:13	87:2,5,8,15,	<b>back</b>	<b>base</b>	<b>big</b>
	18,22 90:5,8	16:12 17:11	47:13	34:5
<b>attorney</b>	91:4,15 95:7,	18:20,25	<b>based</b>	<b>binding</b>
4:5,6 5:17,18,	10,13,23	19:15 21:17	14:20 15:7,10	6:14
19,22,25	96:24 97:9,14	33:18 35:8	27:25 39:7	<b>bit</b>
6:17,19 7:2	101:15	40:16,18	97:7 103:1	51:6 65:16
10:24 11:4,8,	103:24 104:1,	46:21,23	114:5 123:8,	118:9
14,17,19,24	12,13,19	49:19 50:2	14	<b>block</b>
12:2,3,7 13:8,	105:21,23	63:1 68:11		85:16 93:25
15 14:12,13	115:6,9,17,21	77:24 78:2		
15:4,12,17,	116:13,17	82:18,20,23		
19,23 16:10	117:5,15	104:18,20		
20:13,16	120:12,14,18,	105:3 113:24		
23:25 24:5,9,	22 121:7,10,			

## DR. DONALD TURNBULL

August 30, 2024

<b>blocked</b> 68:2 76:11 77:2 81:21 83:6,14,17,25 84:25 85:4	7 <b>British</b> 6:16 <b>broad</b> 48:19 76:6 96:8	<b>capable</b> 114:14,22 115:10 116:25 117:4, 19 <b>caption</b> 10:4,13 24:24 25:16	<b>caution</b> 11:8 <b>Cellco</b> 5:7 <b>certainty</b> 49:16 50:13 <b>certified</b> 6:8,9 10:23 24:8 29:14 30:10 40:9	<b>cite</b> 67:3 91:24 121:22 123:1 <b>cited</b> 33:21 34:22 35:17 37:3 38:21 98:3 122:7,14,17
<b>blocking</b> 76:18 83:21 84:3	<b>broader</b> 49:2 97:5	<b>career</b> 98:18 100:12		<b>City</b> 99:5
<b>BLVD</b> 3:10	<b>build</b> 42:21 73:20	<b>case</b> 8:24 10:4,13 14:15 15:21, 24,25 16:12 17:13 18:5,14 20:12,15,18, 22 24:24,25	<b>claim</b> 43:23 46:25 56:9 70:13 77:18 78:24 82:1,11 97:13 101:10 120:13 129:20,24 130:1,4	<b>claim</b> 4:24 8:23 14:14,20 15:15 20:18, 21 28:21 29:18,21 30:3,13,19 32:15,18,23 33:14 36:24 37:4 42:4,23 45:23 46:10, 13,14 48:19, 21 49:1,22 51:11,12 52:19,22 53:8,14,17,23 54:3 55:5 56:7,12,15, 19,22 57:2,4, 6,9,16,18,21 58:5,24 60:11,14 61:5,19 62:8 65:14 76:8 77:11,16 79:21,25 80:2,9,18 82:3,5 83:9, 13,16 84:9 86:6,7,8 87:11,14 88:22,24
<b>body</b> 87:10	<b>building</b> 73:10 119:22 123:12	<b>case</b> 8:24 10:4,13 14:15 15:21, 24,25 16:12 17:13 18:5,14 20:12,15,18, 22 24:24,25		
<b>boilerplate</b> 14:2 47:20	<b>built</b> 54:12	<b>case</b> 25:6,16,17,22 27:3,12 28:10,11,13, 16,19,22 29:2,11,16,	<b>chance</b> 19:15 24:6	
<b>bold</b> 94:11 110:19	<b>buried</b> 129:7	<b>case</b> 91:10 93:7 95:14 123:16 124:10,24,25 125:15,17 126:19,23 128:3,4,17	<b>change</b> 15:7 102:5	
<b>bolded</b> 27:7		<b>cases</b> 7:12,13 14:16,21 15:2,22 19:5 22:8,9,11,17 26:19,23	<b>changed</b> 14:24 53:19	
<b>books</b> 100:17	<b>C</b>	<b>cases</b> 27:21 75:16 91:10 93:7 95:14 123:16 124:10,24,25 125:15,17 126:19,23 128:3,4,17	<b>character</b> 13:10,13 34:14	
<b>bottom</b> 27:15 36:22 52:5,12 124:18	<b>C.C.P.</b> 6:11,23	<b>cases</b> 7:12,13 14:16,21 15:2,22 19:5 22:8,9,11,17 26:19,23	<b>chatting</b> 119:22	
<b>brackets</b> 57:12,15 58:18,21	<b>CA</b> 3:10	<b>cases</b> 27:21 75:16 91:10 93:7 95:14 123:16 124:10,24,25 125:15,17 126:19,23 128:3,4,17	<b>check</b> 22:13	
<b>breadth</b> 15:8 16:19 18:1 23:9 39:21 44:17 48:14,17,22 49:7 76:5 113:2 120:24	<b>called</b> 6:22 57:1 97:3 99:19 115:16	<b>cases</b> 7:12,13 14:16,21 15:2,22 19:5 22:8,9,11,17 26:19,23 27:21 28:11 30:4 126:16	<b>chronological</b> 27:21 28:1	
<b>break</b> 8:15,17,19 40:21 41:6 78:4,10 104:22 105:1,	<b>calling</b> 11:16 21:18 93:15	<b>cases</b> 27:21 75:16 91:10 93:7 95:14 123:16 124:10,24,25 125:15,17 126:19,23 128:3,4,17	<b>circumstance</b> 84:24	
		<b>caught</b> 39:19	<b>citations</b> 91:21	

## DR. DONALD TURNBULL

August 30, 2024

89:8,12,13 90:2 92:9,12, 19 93:1,8,9 94:12,17,25 95:1,11,12, 20,21 96:4, 16,17,21,22, 23 97:3,11, 12,15,16,18, 21,25 98:11, 19 101:8,18, 21,23 102:14, 18 105:14,18 106:2,4,5,15 108:3,9 109:15,16,19 110:1,2,4,8,9, 10,11,15 111:4,22 112:1,5,10 114:6,8,11 115:23 116:1, 3 117:10,13 119:4 124:9 125:1,22 127:6 128:16	70:13 77:18 78:24 82:1,11 97:13 101:10 120:13 <b>clarify</b> 8:10 23:6 39:1 128:14 <b>clarity</b> 51:7 71:7,18, 22 <b>class</b> 69:17 <b>classify</b> 106:7 114:13 116:18 <b>classifying</b> 116:21 <b>clause</b> 106:14 <b>clear</b> 11:20,23,24 51:4,8,17,23 62:24 63:6 119:1 127:5 128:23 <b>clearing</b> 101:11 <b>click</b> 6:4 <b>close</b> 7:22 32:4 <b>Coalson</b> 3:14 5:12 <b>code</b> 73:17 <b>collaborated</b> 13:9	<b>Columbia</b> 6:16 <b>column</b> 60:12 91:24, 25 94:1 99:19 106:1 <b>columns</b> 98:6 <b>combination</b> 39:6 <b>comma</b> 119:11 <b>common</b> 119:21 120:9 121:3,19 122:5 123:10 <b>communicated</b> 69:19 <b>communication</b> 61:24 62:24 63:6,13,17 64:2 67:6,7,8, 10,16,22,23, 24 68:18,19 69:1,4,13,15, 17,19,23,25 70:8,16,19, 20,24,25 71:1,2,11,12, 14,20 72:1,3, 8,22,23 73:7 74:7,8 75:6,9, 13 81:1,2,7, 10,13,20 82:7 83:5,17,21, 24,25 84:4,9, 23,25 85:5,6, 14,16,19	<b>communicati</b> on's 68:2 <b>communicati</b> ons 11:1 45:22 56:3 57:24,25 58:5,12,25 59:1 60:17 61:2,20,24 62:2,9,10,19 65:19 66:17, 20,23 67:1,20 68:8,13 71:6 80:1,3,10,12, 19 100:2 <b>Company</b> 28:6 <b>complaint</b> 22:14 <b>complete</b> 19:4 20:11, 20,23 27:2 <b>complexity</b> 43:9 <b>complicated</b> 76:3 <b>compounding</b> 94:17 95:24 <b>compounds</b> 96:19 <b>comprise</b> 65:19 66:17 <b>comprising</b> 60:16 61:7 <b>computer</b> 16:4 22:15 33:9 69:22 100:3,23	123:12 <b>concept</b> 44:19 45:1 48:8 95:3 123:7 <b>concluded</b> 130:17 <b>conclusion</b> 97:21 126:11 <b>conclusory</b> 127:24 <b>conference</b> 100:1,16 <b>configured</b> 106:7 <b>confirm</b> 58:4 <b>confusing</b> 95:25 <b>confusion</b> 94:17 95:24 96:19 110:11 <b>connection</b> 82:10 <b>considered</b> 32:12 69:12 70:12,15 71:1,3 72:20 74:7,10,12 117:1 <b>consistent</b> 21:15 <b>constitutes</b> 88:16 90:22 92:5 <b>construction</b> 4:24 8:23 14:14,20
---	---	--	--	---

## DR. DONALD TURNBULL

August 30, 2024

15:15 20:18, 21 28:21 29:19,21 30:3,13,19 32:15,19,23 33:14 37:4 42:5,22,24 52:19 53:8 55:5 56:7 60:22 61:1,10 62:14 96:17 98:12 101:21, 23 102:14 107:6 124:9 125:2 127:6 128:16	<b>contrast</b> 91:12 113:12 <b>contrasting</b> 91:10 <b>control</b> 76:16 77:4,9 79:16,20 <b>conversation</b> 100:1 <b>conversations</b> 12:5,9 <b>convinced</b> 34:13	86:23 89:1,4 91:22 97:16 102:11 107:1 123:22 128:17 <b>correction</b> 20:1 93:20 <b>corrections</b> 19:7 20:8 29:8 <b>correctly</b> 70:1 <b>counsel</b> 6:12 11:7,11, 16,19 12:6,12 <b>convincing</b> 51:4,17,23 <b>copy</b> 25:5,21,25 26:12 59:24 60:7 130:6 <b>core</b> 125:21 <b>Corporate</b> 5:8 <b>correct</b> 7:5,8,17 9:6, 9,12 10:17 14:17,21 17:22 18:9 21:23 22:19 23:24 25:3,5, 21 26:2,12 32:13,16 42:5 <b>continue</b> 45:2 46:14 47:3 52:7 53:4 56:4 59:24 60:7 62:24 76:16 79:16 80:16	123:25 126:7, 19 127:17,23 <b>covered</b> 83:2 <b>covers</b> 118:21 <b>creates</b> 110:2 <b>cross</b> 19:9 <b>CRUTCHER</b> 3:4 <b>cued</b> 65:7 <b>cumulative</b> 15:6 <b>curious</b> 58:3 100:13 <b>current</b> 25:25 <b>customary</b> 126:2 <b>CV</b> 4:19 25:25 <b>count</b> 59:16 124:22 <b>counterintuitive</b> 82:9 <b>couple</b> 9:13 23:19 96:10 100:4, 22 109:1,10 110:13 128:19 129:1 <b>court</b> 5:11 6:6 8:2 29:18 30:21	9:17 <b>day</b> 26:8 <b>days</b> 17:3,4,5 <b>decided</b> 30:20,21 101:25 102:9 124:2 <b>decision</b> 102:21 103:20 <b>declaration</b> 4:16,18 8:23 9:5,8,11,14, 17,20 10:5,16 12:22,24 13:2,7 14:25 16:12,14,22 17:17,19 18:4 19:4 21:10,11 22:23 24:23 25:6,15,21 26:7 28:22 32:1,13 38:6 47:6 62:22 63:1 102:18 103:11 104:3 105:4 108:6 125:1,13,15 127:24 128:2 <b>declarations</b> 9:1,25 12:18 21:22 26:20 32:5 38:8 <b>defendants</b> 5:23 6:19 9:6 25:16 36:23 <b>define</b> 70:19 71:8
--	---	---	---	--

## DR. DONALD TURNBULL

August 30, 2024

74:16,22 75:4 91:9 115:19	50:20 84:24 95:12	<b>detailed</b> 110:17	<b>digital</b> 100:11	78:9,21 79:5 83:4 90:17
<b>defined</b> 70:2 72:11,17	<b>depends</b> 51:8 73:2	<b>device</b> 81:21 83:6, 18,21,25	<b>directly</b> 105:9 106:9, 21 107:10	104:3 111:16 113:3 122:7
<b>defining</b> 44:6 71:15 102:19	<b>deposed</b> 28:13,15,24	84:25 101:16 105:9 106:9, 21 107:10	108:1,21 109:9,20	<b>discussed</b> 19:1 23:7 25:10 39:9
<b>definite</b> 70:4 112:17	<b>deposition</b> 5:4,10,14 6:13 7:8 8:16 21:3,7 29:1,6,	110:22 111:1, 109:19 110:16,22	110:22 111:1, 6,7,18,24,25 112:4,11,24 113:11,15	41:5 42:7 65:16 81:5 98:17 129:14
<b>definiteness</b> 50:6,12	11 31:4,7 59:20 128:12, 16	111:18 112:24 114:15,17,19, 24 115:1	<b>disagree</b> 103:23	<b>discusses</b> 111:20 118:17,25
<b>definition</b> 47:5 64:13 69:9,20 73:25 84:15 123:9	<b>depositions</b> 5:13 7:23 26:21	116:6,8 117:21,23 119:8,14,16, 19,25 121:13, 16 123:2,3	<b>disagreed</b> 74:9	<b>discussing</b> 30:6 42:16 56:12,13
<b>definitive</b> 96:15	<b>depth</b> 15:8	123:6	<b>disagreements</b> 103:14	57:10 58:16 67:21 70:24
<b>definitively</b> 97:24 113:11	<b>describe</b> 34:4 49:22 54:8 73:13	<b>devote</b> 123:6	<b>disappointing</b> 103:19	85:8 88:13 93:23 95:3
<b>degree</b> 48:6	115:13	<b>dictionary</b> 64:13	<b>disclaimer</b> 44:14,16,19, 23 45:4 46:2, 19	105:7,20 109:12,22,23
<b>deja</b> 7:7	<b>describes</b> 76:18 79:25 80:2,10,19 82:6	<b>difference</b> 100:25 102:17 120:5	<b>disclose</b> 11:9 12:5,8	110:14,20 112:14 113:14 123:7 126:21
<b>deliberately</b> 44:5	<b>describing</b> 66:24 73:12, 16,19	<b>differences</b> 10:1,3,9,11, 14	<b>disclosing</b> 41:13	<b>discussion</b> 69:7 70:3 74:21,23
<b>depend</b> 48:21 49:6,11 50:24 51:1 86:25 87:6,10	<b>description</b> 4:15 54:4	<b>differentiate</b> 124:24	<b>disclosure</b> 88:15 90:21	82:16 90:1 118:7 120:4
<b>dependency</b> 87:21	71:22 73:22 76:8 87:20 95:17 96:11	<b>differentiation</b> 91:18 96:22 97:4,19 110:1	<b>disclosures</b> 66:3,12 68:7	<b>discussions</b> 10:25 11:9,10 40:20 41:5
<b>dependent</b> 94:24 96:5 97:5,11,15 105:14	<b>destination</b> 63:15	<b>difficulties</b> 82:25	<b>discuss</b> 11:7,15 12:10 41:2,8 43:16 45:1 49:5	104:25
<b>depending</b> 48:22 49:1	<b>detail</b> 120:3	<b>difficulty</b> 117:12	53:1 54:13 59:25 60:7 68:18 75:18	<b>disputes</b> 125:22
				<b>disruption</b> 82:10

## DR. DONALD TURNBULL

August 30, 2024

<b>distinction</b> 84:22 118:10 120:2	45:21 56:3 57:23 61:2 94:18 106:7 116:19	<b>editing</b> 11:3 13:24 19:17	118:25 122:1 126:8	<b>examples</b> 67:3 69:20 83:20 85:3 113:14
<b>District</b> 7:14	<b>download</b> 24:6	<b>educated</b> 33:11	<b>entirety</b> 118:20	<b>exceed</b> 122:4
<b>docket</b> 22:13 124:11	<b>downloaded</b> 24:15 59:14	<b>effort</b> 53:12 119:2	<b>entitled</b> 24:23 59:20 124:9	<b>Excellent</b> 8:11
<b>Doctor</b> 79:3 117:16 123:15 124:17 128:3	<b>dozens</b> 14:16	<b>Electronics</b> 28:4,6	<b>error</b> 21:15	<b>exchange</b> 36:23
<b>doctrine</b> 97:3	<b>draw</b> 118:10	<b>element</b> 51:12 101:13	<b>errors</b> 19:17	<b>Excuse</b> 13:5 55:25
<b>document</b> 24:22 25:3,14 26:1,4,10,12 37:6 59:21,23 60:4 99:9 124:9,17 125:7,21 126:8 127:4	<b>Dunn</b> 3:4 5:22 17:22 18:8	<b>elements</b> 118:4	<b>ESQ</b> 3:4,9,17	<b>executed</b> 26:7
	<b>E</b>	<b>embodiments</b> 83:20 84:3	<b>essentially</b> 64:9,15 65:5,7 92:5 96:10 97:7 126:11	<b>exhaustively</b> 36:5
	<b>earlier</b> 9:12 72:12 93:19 95:4	<b>encourage</b> 11:19	<b>establish</b> 9:16 88:16 90:21 91:7 102:18	<b>exhibit</b> 4:15,16,18, 21,22,24 24:9,10,11, 13,19,22
<b>documentation</b> 55:6	98:2 99:7 101:21 118:7	<b>end</b> 26:11 78:20	<b>et al</b> 5:6	25:2,11,14,24 26:1,10,11,17
<b>documented</b> 16:19,20	124:22 126:22 128:12,20	79:3,9 113:19 116:4,5 119:17	<b>evidence</b> 36:24 37:9 51:4,17,24	27:20 32:3,4, 8 57:17 59:7, 9,11,14,19,23
<b>documents</b> 21:4,21 23:5, 6,10 33:6,10, 11,12,15 37:2,3,5,10, 20,21,22 39:22 99:12 100:15	<b>earliest</b> 35:13	<b>end-user</b> 119:13	121:22 123:1	60:2,3,6,10, 11 89:8
<b>Donald</b> 4:16,18,19 5:4 6:21 24:23 25:15	<b>early</b> 36:15	<b>Endeca</b> 27:4	<b>Evolution</b> 99:22	105:25 106:2
	<b>Eastern</b> 7:14	<b>enforce</b> 84:19	<b>exact</b> 77:6	124:3,5,9,13 128:15
	<b>edit</b> 17:11	<b>English</b> 64:12	<b>EXAMINATIO</b> N 4:3 7:1 128:9 129:2	<b>exhibits</b> 4:14 24:1 31:11 37:18 59:3
	<b>edited</b> 13:12 14:4 31:24 42:11 47:22,24	<b>entered</b> 21:8	<b>examine</b> 49:12	<b>existed</b> 74:20
<b>dot</b>		<b>entire</b> 59:16 87:10	<b>examined</b> 6:24	<b>experience</b> 15:6,11 16:4,

## DR. DONALD TURNBULL

August 30, 2024

21 98:15	62:22 73:1	21 22:25	107:5 108:23	43:1,7 45:6
108:11 123:9	90:7 103:7	23:1,4,11	113:23	48:4,16 49:9,
<b>expert</b>	110:14 123:5	24:18 25:25	114:20	18 50:1,8,23
14:16 17:12	<b>fails</b>	33:19,21 34:2	<b>focused</b>	51:19,25
37:23 38:6,8	90:18	35:24 44:7	87:13 110:17	54:12 56:10
102:14,16,18	<b>fair</b>	53:1,13	<b>focusing</b>	58:8,14,22
103:11,17,18	8:7,8 48:2	<b>filed</b>	64:7 65:1,20	64:7 65:1,20
127:10,11	<b>faith</b>	35:22 55:13	<b>folder</b>	66:18,25
<b>explain</b>	53:12	<b>Finally</b>	67:12 77:5	67:12 77:5
53:20 73:6	<b>fall</b>	108:9	<b>follow</b>	79:17,22
75:15 113:1	48:11	<b>find</b>	80:4,11,21	80:4,11,21
119:3	<b>familiar</b>	31:25 34:18	<b>follow</b>	82:4 83:12
<b>explained</b>	7:10 28:14	39:20 95:19	<b>follow-ups</b>	84:6 86:14
76:1	35:2 44:14	126:19	<b>foreground</b>	87:2,8,18
<b>explaining</b>	100:19,21	<b>findings</b>	90:5 91:4	90:5 91:4
54:16 113:14	121:6,9,16	103:15	<b>foreground</b>	95:7,13 96:24
<b>explanation</b>	122:3 125:4	<b>fine</b>	103:24	103:24
92:5 112:12	<b>family</b>	19:24 24:16	105:21 115:6,	105:21 115:6,
<b>extend</b>	96:13	129:25	17 116:13	17 116:13
17:9	<b>fast</b>	<b>Finish</b>	117:5 120:14,	117:5 120:14,
<b>extensive</b>	99:15,16	11:18	22 121:10,18	22 121:10,18
66:3,11 68:7	<b>feel</b>	<b>finished</b>	122:9	122:9
<b>extent</b>	40:4 48:7	11:25 27:25	<b>formatted</b>	<b>formatted</b>
10:24 12:4	84:17 109:22	<b>firm</b>	27:9	27:9
19:2 67:18	111:20	5:20 17:22	<b>formatting</b>	<b>formatting</b>
<b>extra</b>	112:14	<b>fit</b>	34:9	34:9
54:1	113:16 118:2,	65:5 66:24	<b>formed</b>	<b>formed</b>
<b>extrinsic</b>	25	<b>fits</b>	15:1 102:25	15:1 102:25
36:24 37:9	<b>feeling</b>	33:12	103:1	103:1
<b>eyes</b>	7:7	<b>Five-zero</b>	<b>forming</b>	<b>forming</b>
49:23	<b>fewer</b>	45:15	32:12	32:12
	18:19,21	<b>fix</b>	<b>found</b>	<b>found</b>
<b>F</b>	<b>field</b>	20:5	87:23 95:11	87:23 95:11
<b>face</b>	33:11	<b>FL</b>	123:24	123:24
122:7,14	<b>figures</b>	3:10	126:13	126:13
<b>fact</b>	13:18	<b>focus</b>	<b>FRIDAY</b>	<b>FRIDAY</b>
23:9 57:18	<b>file</b>	66:9 71:24	5:1	5:1
	10:6,17 21:5,	106:17,19	<b>full</b>	<b>full</b>
			57:6,23 59:13	57:6,23 59:13
			103:18 113:2	103:18 113:2
			120:24	120:24

## DR. DONALD TURNBULL

August 30, 2024

127:19	<b>good</b>	125:16	30:4 33:14	18:17,19,21
<b>functionality</b>	6:8 7:3 15:5	126:22	123:16	23:19
115:11	21:14 47:12	<b>guessing</b>	124:10 126:2,	<b>hypothetical</b>
<b>fundamental</b>	53:12 76:22	72:18 104:8	16 128:17	71:25 72:21
78:21 79:5	85:10	125:18	130:14	73:1,22 74:21
<hr/>				
<b>G</b>				
<b>gallery</b>	<b>gosh</b>	<b>guides</b>	<b>hear</b>	<b>I</b>
6:5	7:22 73:8	99:3	69:18	
<b>gave</b>	<b>great</b>		<b>heard</b>	
29:10 55:7	74:22		44:15 64:4	<b>i.e.</b>
64:15 128:20	<b>ground</b>	<b>habit</b>	89:22 95:11	63:17,21
<b>general</b>	39:5,10 83:1	17:6	113:24	<b>idea</b>
42:19 48:8	<b>grounds</b>	<b>happen</b>	<b>held</b>	36:3 87:13
74:3 85:2	39:4,16	76:15 77:8	82:16	88:3 95:4
88:3	<b>Group</b>	<b>happened</b>	<b>helpful</b>	98:22 111:17
<b>generally</b>	5:9	29:20 85:9	105:24	112:16
15:10,18 34:7	<b>grouping</b>	<b>hard</b>	<b>Hey</b>	121:22
42:6 43:10	86:12	15:24	76:20	<b>ideas</b>
54:6 57:21	<b>grueling</b>	<b>head</b>	<b>histories</b>	64:10 65:12
64:10 67:13	17:4	16:25 19:13	21:5,21 22:25	<b>identification</b>
77:7 79:18	<b>guess</b>	23:12 39:13	23:1,5,11	24:12,14
<b>Georgia</b>	14:23 27:13	41:21 44:24	33:19,22 53:1	59:8,10
100:25	38:7 42:17	100:22 101:6	<b>history</b>	124:14
<b>Gibson</b>	43:8 47:16	102:1 103:5	10:6,17 31:22	<b>identified</b>
3:4 5:22	48:10 53:5,17	119:5 123:21	33:9 34:2	60:21 106:18
17:22 18:8	54:1 56:21,25	<b>header</b>	35:24 44:7	107:6 109:18
<b>give</b>	58:15 59:12,	56:22	52:7,10,15,	<b>identifies</b>
7:25 15:16	15 61:23 64:8	<b>heading</b>	18,23 53:13	26:19
17:8 31:14	65:2 67:1,18	42:1 45:19	54:22 55:2,4,	<b>identify</b>
54:5 69:8	71:16 72:13	46:8,11 52:10	11 123:12	5:16 55:9
74:4,12 87:10	73:13 74:1,14	57:2,11 86:1,	<b>Hogan</b>	<b>ignore</b>
103:18 113:4	76:17 79:18	2,13 89:5	5:25	107:19
<b>giving</b>	84:19 85:8	101:14 105:3	<b>hope</b>	<b>illogical</b>
53:24	96:9 99:20	110:18	32:21 53:21	81:19 83:4
	100:3,23	114:11 116:4	70:9 99:16	<b>imply</b>
	104:23	126:10	103:6	47:24
<b>goal</b>	115:18	<b>Headwater</b>	<b>hour</b>	<b>impossible</b>
53:21	119:11 121:4,	5:5,7,21 6:18	8:19 76:21	72:16
	24 123:8	7:12 22:4,7,	<b>hours</b>	
		16,21 28:3	16:23,25 17:3	

## **DR. DONALD TURNBULL**

August 30, 2024

<b>improve</b> 53:20 84:18	121:5 123:6, 25 126:1,13, 20 127:17 128:5	49:15 50:7 <b>initiated</b> 66:4,13,22 67:6,7,11,23 68:14,19 69:3,15,19,24 70:5,17,25 71:11 72:1,22 74:6,16 75:6, 10,11,23 76:2,5,11	21 107:10 108:1,22 109:7,9,20 110:3,15,22 111:2,3,7,12, 18,23,24,25 112:4,11,24 113:9 114:14, 17,18,22,25 116:5,20 117:19,22 118:10 119:8	60:3
<b>in-</b> 29:13				<b>introduced</b> 105:25
<b>in-court</b> 7:23 26:20				<b>introducing</b> 59:19 124:8
<b>include</b> 16:2 27:1 37:18 38:14, 20 48:10 84:3 99:13	29:16 47:3 48:2,15 49:14 51:3,16 81:5 94:22 95:1 107:7 111:11 114:1 116:3 126:17	70:5,17,25 71:11 72:1,22 74:6,16 75:6, 10,11,23 76:2,5,11		<b>invalid</b> 51:13
<b>included</b> 36:6 58:16		<b>inserted</b> 34:15 57:8		<b>invention</b> 73:12 78:22 79:6
<b>includes</b> 38:6 66:3,11 68:7 94:8 112:4	87:17 97:4 110:4	<b>inserting</b> 57:9	<b>interaction</b> 94:9,10,13,14	<b>inventor</b> 43:16,20 44:3 101:5
<b>including</b> 21:6		<b>insights</b> 55:7,9		<b>involved</b> 18:13,14 102:15 125:18
<b>Incorporated</b> 5:6,9	<b>INDEX</b> 4:1	<b>instance</b> 109:6 111:11 113:7		<b>involves</b> 41:4
<b>incorrect</b> 82:9	<b>indication</b> 117:13	<b>instances</b> 79:9	<b>interest</b> 36:18 39:19	<b>involving</b> 26:20
<b>indefinite</b> 48:20 49:8 51:12 61:17 62:4,17 69:10 71:16 73:4 81:10,13 86:23 87:24 95:12,19 107:1,23 108:4,10,25 109:20 110:8, 12 111:6 112:11,21 113:1 115:16, 19,24 116:1 117:13 118:1, 2,15 120:3,5	<b>indirectly</b> 109:7 111:12, 23 113:8,15	<b>instruct</b> 11:1 12:4 41:3,15	<b>interesting</b> 34:19 36:1	<b>IPR</b> 37:12,18,23 38:5,22 39:3, 10,23
	<b>individual</b> 117:8	<b>INSTRUCTED</b> 4:8	<b>interface</b> 110:16 114:15,18,19, 23 116:8	<b>IPRS</b> 37:17 38:15
	<b>individually</b> 88:1 118:5,6	<b>instructing</b> 11:21 78:11	<b>instruction</b> 117:20,23 119:9,16,20, 25 121:8,13, 16,17 123:2,3	<b>issue</b> 96:22 118:19
	<b>inform</b> 16:14,17 90:18 98:18 99:11,13	<b>intend</b> 12:14 41:20 78:14	<b>interim</b> 130:2	<b>issued</b> 29:18
	<b>information</b> 9:16 53:24 97:24 98:7	<b>intend</b> 20:12,17,21	<b>internet</b> 114:16,24	<b>issues</b> 16:7 30:21
	<b>informed</b> 97:3 100:8, 14,17 103:21 108:2	<b>intended</b> 63:15 94:21	<b>intend</b> 117:21 122:1	<b>119:1,3</b> 121:24
	<b>inherent</b>	<b>interacting</b> 105:9 106:10,	<b>introduce</b> 24:1,22 25:14 57:17 59:3	<b>item</b> 27:16 28:2 30:14

## DR. DONALD TURNBULL

August 30, 2024

J	L	leave 6:4  labeled 124:5  judge 30:19,24 101:24 102:9, 20 103:3,14, 20,22 104:4 124:20  Julie 5:11 6:9 99:17	list 27:2,15 28:3 32:11,15 33:7,16,19,24 34:21 35:17 36:22 37:6,13 53:16 98:3 99:19 105:18  listed 32:17,20 33:25 38:10, 18  literally 73:4 74:22  LLC 5:6,7,21 6:1 7:12 28:3  LLP 3:4  located 5:13 6:15  location- based 36:14,16 99:6,22  long 7:8,9 23:18, 19 34:1 36:8, 20 124:12  library 100:11  light 49:16 50:13 55:25  leads 11:20 39:15  learn 52:20 53:18  learning 54:17	Los 3:10 5:13  lot 16:25 21:4,20 23:5 47:23 119:2 122:3 125:5  Lovetts 5:25  lunch 104:16,22  M  made 19:17 20:2 102:17  make 11:22 19:23 20:2 29:8 34:16 48:20 53:12 64:24 67:10 74:24 90:1 102:20 103:20 109:15 112:15,16 120:17 128:22  makes 95:25 96:20  making 11:25 21:16 63:9 88:14,21  manner 43:21 44:4  map 76:2  marked 24:11,13
journal 100:3				
judge 30:19,24 101:24 102:9, 20 103:3,14, 20,22 104:4 124:20				
Julie 5:11 6:9 99:17				
K  Kabat 3:9 5:21  key 53:19  keyword 34:12  kind 18:19 34:3,4, 18 35:12,14 57:20 72:18 74:3,23 83:22 86:1 96:19 99:15 107:24 111:8 123:9 129:6  kinds 38:24  knew 36:13  knowledge 123:1  Koryn 3:14 5:12				

## DR. DONALD TURNBULL

August 30, 2024

59:7,9 94:11	<b>meant</b>	<b>minor</b>	<b>net</b>	34:23 96:9
124:13	23:6,7 126:25	10:1	18:23	<b>noticed</b>
126:15	<b>media</b>	<b>minute</b>	<b>network</b>	122:17
<b>married</b>	5:4	31:14	45:22 57:12,	<b>noticing</b>
64:21	<b>meeting</b>	<b>minutes</b>	24 58:6,12	5:17
<b>match</b>	23:18,21	65:17	60:18 61:2,	<b>noun</b>
71:7	<b>meetings</b>	<b>misremember</b>	21,24 62:3,9,	115:5,16
<b>matches</b>	23:16	<b>ed</b>	10,20 63:6,	117:2 118:14
104:8	<b>memorize</b>	126:25	14,18 64:2	<b>number</b>
<b>matching</b>	102:4 104:6	<b>missed</b>	67:20 68:9,20	5:4 6:10
34:15	<b>memory</b>	34:17 87:4	69:5,13 70:8,	25:17 27:16
<b>material</b>	15:25 30:24	<b>missing</b>	16 71:2,12	30:15 35:18,
10:19	45:7 122:22	48:6	72:4,9,24	20 59:21 60:4
<b>materials</b>	124:23 127:4	<b>mobile</b>	73:7 74:8	125:3,17
32:11	<b>mention</b>	99:22	75:14 76:16	<b>numbers</b>
<b>matter</b>	109:3,4	<b>modifier</b>	77:4,9 79:8,	7:14,15 24:25
5:5 48:5	<b>mentioned</b>	50:17 116:14	15,16,20	124:24 125:4,
49:17 50:13	7:11 19:20	<b>modifying</b>	80:13,20	5
85:2	21:20 28:25	58:24	81:21 82:7	<b>O</b>
<b>matters</b>	33:13 35:25	<b>months</b>	83:5,17 84:3	<b>oath</b>
5:5 50:25	36:7 51:8	17:20	85:20	6:14,23 7:18,
125:18	73:1 74:25	<b>morning</b>	<b>network]</b>	20,25
<b>meaning</b>	98:2,20	6:8 7:3 31:13	56:4	<b>object</b>
43:22 44:5	101:21	93:19	<b>nice</b>	10:24 12:3
61:14 64:12	<b>mentions</b>	<b>muted</b>	18:19 104:22	13:8 14:12
65:5 101:25	83:19	5:18,19	<b>nodding</b>	15:4,17,23
102:10 103:3	<b>met</b>	<b>N</b>	39:13	20:13 37:7
126:3	7:5 23:13	<b>named</b>	<b>nods</b>	40:5 43:1,7
<b>means</b>	50:12	100:23 101:5	41:21	45:6 48:4,16
27:8 37:9	<b>middle</b>	<b>names</b>	<b>nonetheless</b>	49:9,18 50:1,
50:11,17	60:13 81:6,18	23:24	16:1	8,23 51:19,25
55:21 63:13,	97:2 109:5	<b>narrow</b>	<b>nonsubstanti</b>	55:15
23 69:9,21	114:20	31:1	<b>ve</b>	56:10 58:8,
71:8,19 73:25	116:24	<b>negative</b>	<b>normal</b>	14,22 64:7
74:24 90:12	127:16	73:8 121:25	129:22	65:1,20
91:8 95:9	<b>mind</b>		<b>note</b>	66:18,25
111:2,3 114:6	10:20 20:10		7:13 19:14	67:12 77:5
117:9 118:9,	33:8,17 52:1			79:17,22
10 120:25	55:12 64:14			80:4,11,21
				82:4 83:12

## DR. DONALD TURNBULL

August 30, 2024

84:6 86:14	<b>officer</b>	106:25 107:7, 22 108:10,24	30:13,17 31:3	<b>paper</b>
87:2,8,18	6:14	111:17	32:23 33:14	33:25 35:24
90:5 91:4	<b>official</b>	112:10	73:15 101:21,	36:7,10
95:7,13 96:24	6:10	113:22 114:2,	23 102:25	98:20,22
103:24		103:3,8,15	104:4 124:9	99:3,22
105:21 115:6,	<b>oldest</b>	4 115:15	100:6,10	
17 116:13	27:22	116:2 117:11,	127:6,14	122:1
117:5 120:12,	<b>omitted</b>	25 118:12	128:16	<b>papers</b>
14,22 121:10,	10:6,16,21,22	121:15	129:21	33:25 36:14
18 122:9	11:3 31:13,15	124:20	<b>orders</b>	37:15 38:14
129:5	58:21	126:17 128:5	30:3 32:16,19	39:24 99:7
<b>objection</b>	<b>one-to-one</b>	<b>opinions</b>	<b>ordinary</b>	100:16
6:13,17,19	71:7	10:12,14	43:21 44:5	<b>para</b>
<b>objections</b>	<b>ongoing</b>	13:14 14:6,9,	74:5 101:25	54:25
11:20,25	27:24	14,25 15:14	102:9 103:3	<b>paragraph</b>
<b>obtain</b>	<b>open</b>	16:11,14,17	125:8 126:2	32:7,11,20
47:8,15	24:18,20	18:5,22 19:5	<b>original</b>	33:18 41:22
<b>obviousness</b>	25:11,13	20:12,14,17,	22:14	43:13 44:2
39:6	31:11 60:2,10	21 28:20	<b>overlap</b>	45:1,14 46:4,
<b>occur</b>	124:7	29:16 32:12	104:8	21,24 47:2,12
68:3 76:12	<b>opened</b>	42:13 44:22	<b>overview</b>	48:2,6,12
77:3	22:5	45:10 46:1,18	34:12 52:15	49:5 51:11,21
<b>offer</b>	<b>opine</b>	47:6,13	54:20 55:1	52:3,6,8,9,12
14:14,25	61:13	52:19,23 53:8	<b>OWNER</b>	53:5,6 54:23
20:12,18,21	<b>opined</b>	54:10,12	3:8	55:23,24
44:22 45:10	22:22	55:5,10 56:8,	<b>owners</b>	56:24 57:1
46:1,18 56:20	<b>opining</b>	20 61:14,16	38:3	63:2,8 65:24
61:16 62:16	92:13 128:4	75:4 86:25		66:2,6 70:22
89:24 90:3,10		87:6,16,24	<b>P</b>	76:10 78:16
91:1 102:6	<b>opinion</b>	88:6,14 94:22		79:3,4 80:24
115:15	39:7 56:2	98:12,23	<b>p.m.</b>	81:15,18 82:8
<b>offered</b>	61:18 62:3,	100:7,14	104:14,17	83:4 88:10
29:13 123:19	16,23 70:22	102:6,23,25	130:16,17	90:14,15
126:17	81:6,9,12	103:1 109:14	<b>pages</b>	91:17,21
<b>offering</b>	83:3 86:22	110:25 119:3,	4:17,20,21,	92:2,15 93:2,
47:6 56:7	88:21 89:24	24 123:20	23,24 25:3,24	24 94:3,7,16
61:13	90:3,10 91:1	129:12	26:2 59:13,	97:2 108:6,14
<b>office</b>	95:18 97:20	<b>optical</b>	25 111:9	109:4,5,8,23,
104:24	99:11,13	34:14	<b>order</b>	112:5,13
	100:18	4:24 27:21	16,21 60:4	113:7 118:23
	103:19	29:19,22	70:2 124:12	127:20

## DR. DONALD TURNBULL

August 30, 2024

<b>paragraphs</b> 10:5,16 53:1 88:20 109:1, 11 110:13 112:19 113:3 114:4 118:8, 17 123:7	<b>partially</b> 35:8	69:8 70:2 71:8,15,18 <b>parties</b> 125:22	102:9,20 103:3,22 124:20 <b>Payne's</b> 103:14,20 104:4	<b>permitted</b> 68:3 76:12 77:3 <b>person</b> 49:23 69:11 71:17 72:13 73:6 74:1,9, 15,19,22 90:11 91:6 96:3 101:3 117:11 119:25 121:3 122:4,25
<b>parallel</b> 19:11,23	<b>Partnership</b> 5:7	18 82:3 83:10 84:2 86:7,8,9 87:10 88:23	<b>PDF</b> 25:25 26:15 34:15 59:13, 16,20 60:4	
<b>parameters</b> 74:18	<b>parts</b> 15:9	89:9 90:2 91:22 92:10, 95:2,12,16,21	<b>PDT</b> 5:1 130:17	
<b>Pardon</b> 101:11	<b>party</b> 27:4,7 103:11	18,20 93:8,25 94:12,17,25 95:2,12,16,21	<b>penalty</b> 8:1	
<b>parse</b> 113:13 118:11	<b>pass</b> 128:8	96:3,23 97:11,15,16 98:25 99:18	<b>pending</b> 8:17	
<b>part</b> 14:10 23:7,20 39:6 42:9,14, 15 47:20 53:14 55:6 56:17 57:19 58:13 60:22 61:10,19 62:2,8 66:9 67:2,9 84:14 96:6,12 98:15,21,23 100:7,8,14 106:19 107:9, 23 108:19,23 109:19 110:7, 15,19 112:22 113:23 114:4, 20 116:1,10, 15,18,24 118:3,23 119:2,6 123:6	<b>passing</b> 99:25	100:20 101:2, 4,9,18 105:15,25 108:9 112:18 114:11 117:10 125:4	<b>people</b> 18:1,14 65:10 98:17 100:23 119:22	
<b>parte</b> 55:15,19	<b>past</b> 22:19	<b>patentable</b> 73:14	<b>perceives</b> 108:15	
	<b>pasted</b> 13:11,16,17, 22,25 14:3	<b>patents</b> 10:7,17 21:4, 21,25 22:1,3, 4,8,13,16,21 23:3,4,8,11 33:19 34:22	<b>perceiving</b> 105:10 106:10 107:15,19	
	<b>patent</b> 3:8 4:21,22 13:18 14:16, 20 15:15 35:13,16,18, 22 36:11 38:3 42:17,22 44:6 45:22 46:14 52:7,10,16, 19,21,24 53:4,9,13 54:4,23 55:1, 5,11 59:12, 15,20,22,24 60:3,5,7,11 63:10 65:14 66:2,11 67:3, 16 68:7,22	23:3,4,8,11 33:19 34:22 35:5,11,19 42:19 53:2 59:4 90:20 96:5,6,7 98:4 114:5 122:8, 14,15	<b>perfect</b> 15:25	
		<b>pause</b> 18:20	<b>perfectly</b> 23:24 34:15	
		<b>Payne</b> 30:24 101:25	<b>period</b> 17:9 26:24 117:23	
			<b>perjury</b> 8:1	
				<b>Philip</b> 3:9 5:18,20 76:20

## DR. DONALD TURNBULL

August 30, 2024

<b>phonetic</b> 85:4	<b>play</b> 22:14 42:20	75:11,12,16 90:18,19 120:8,21	<b>present</b> 3:16 5:16 125:22	<b>proceed</b> 6:12
<b>phrase</b> 57:23 58:4 60:22 62:8, 16,19 77:7 84:17 93:12 94:3,4,8 107:18 108:3 109:3 113:18 115:4,8,18, 22,25 116:15 117:9 118:4, 11 120:25 121:11 122:2 123:6 127:17	<b>plural</b> 61:23 62:1 93:13,14	<b>POSITAS</b> 75:11	<b>presentation</b> 99:10	<b>proceedings</b> 20:18,22 37:24 130:17
	<b>point</b> 8:15 19:21, 24,25 22:6 31:12,20 67:23 70:25 72:22 76:21 90:9 91:3 99:14 100:6 109:17 112:1, 8 118:13	<b>possibilities</b> 71:13 96:8	<b>presentations</b> 100:17	<b>process</b> 13:24
		<b>possibility</b> 54:1	<b>presented</b> 24:11,13 59:7,9 124:13	<b>processors</b> 106:6
		<b>potential</b> 64:9,16,18 65:6 84:8	<b>presenting</b> 72:21	<b>produced</b> 56:23
		<b>potentially</b> 16:9	<b>presumption</b> 97:18	<b>programmed</b> 98:17
<b>phrased</b> 64:1	<b>pointed</b> 127:10	<b>precedence</b> 15:7	<b>pretty</b> 27:1 34:5 63:25 89:21	<b>programming</b> 33:10 100:17
<b>phrases</b> 116:16 121:16	<b>pointing</b> 118:22	<b>precise</b> 49:4,5,21 50:16,18,19 51:9,10 73:11,15	<b>prevent</b> 8:12 79:7	<b>project</b> 47:11
<b>piece</b> 39:20	<b>points</b> 39:11	<b>precisely</b> 44:6 69:7	<b>prevented</b> 79:15	<b>proper</b> 95:6
<b>place</b> 19:9 31:24 109:4	<b>policies</b> 80:3,10,19	<b>precision</b> 49:17,19 50:14,16,21, 25 51:6,10 73:18	<b>previously</b> 25:10	<b>property</b> 117:3
	<b>policy</b> 76:16 77:4, 12,16 79:16, 20,21 83:19, 20,24 84:8, 13,15,16,19, 23,24 85:4, 10,11,12,13, 16	<b>preliminary</b> 36:23 55:13	<b>primarily</b> 18:2	<b>propose</b> 21:8
<b>plain</b> 43:21 44:4 101:25 102:9 103:3		<b>premier</b> 100:3	<b>principle</b> 43:6	<b>proposed</b> 36:23
<b>plaintiff</b> 5:21 6:17 7:12	<b>popped</b> 34:24	<b>prepare</b> 21:3 128:15	<b>principles</b> 16:3 42:2,4,8, 12,16	<b>proposing</b> 58:12 61:1 62:13 75:12
<b>plaintiffs</b> 36:23	<b>portion</b> 13:11	<b>preparing</b> 18:17 22:22 31:3,4,7	<b>prior</b> 9:13 15:11 37:20 38:14, 20 39:3,5,9, 16 47:10	<b>prosecution</b> 31:22 52:7, 10,15,18,23 54:22 55:1,4, 10
<b>plan</b> 21:1	<b>POSITA</b> 70:15 71:10 72:2,4,7,23		<b>problem</b> 70:7 76:7 82:7	<b>prospective</b> 56:3 60:17 61:1 64:4,6, 25 65:3 68:19,22

## DR. DONALD TURNBULL

August 30, 2024

69:4,9,13,23	102:7 107:20	57:3	66:10 68:1	recall
70:16,20	119:2	<b>quote</b>	76:10 78:20	13:23 16:24
71:1,6,8,12,	<b>putting</b>	56:22 57:19	79:4 81:19	17:2,3,20
15 72:3,8,23	86:18 88:4	62:23 79:4,9	88:16 90:16	18:1 22:25
73:7 74:7,17,	93:5	81:19 88:16,	92:3 97:6	23:10,23
24 75:13,24	<b>pwang@</b>	17 89:3 90:11	98:16 99:10	27:11 28:13,
76:2,4 81:1,6	<b>raklaw.com</b>	92:6 93:14,25	100:12,15	15 29:4,9,13,
<b>protocols</b>	3:11	94:4	103:5 105:8	23,24,25 30:1
69:23		<b>quoted</b>	106:5,8,20	31:16 35:9,15
<b>prove</b>	<b>Q</b>	81:13	107:9,14	36:11 38:11
73:13 121:25		<b>quotes</b>	108:8,20	39:21 42:10
<b>proven</b>	<b>Quayle</b>	13:18 19:12,	109:14,22	44:17,21,24
51:4,17	55:15,19	21,23 81:1	110:21,25	47:22,25 55:7
<b>provide</b>	<b>question</b>	92:16 93:3,5,	111:10	58:1 83:7
13:21 52:6	8:17 11:13,15	11,20 110:18	112:23 113:6,	89:23 98:8
54:25 129:4	12:1,10 15:5	112:4 125:11	19 114:10,12,	101:4 102:1,8
<b>provided</b>	39:2,15 40:22		21 115:5	103:25
38:18 39:19	41:4,8 47:14,	<b>R</b>	117:18 119:7	122:20
42:8	17 62:5 64:22	<b>R-A-O</b>	122:1,3	123:17,19
<b>providing</b>	71:24 72:2,7	99:21	123:11	124:2 126:18
16:11 52:14	75:8 78:5	<b>raised</b>	<b>readable</b>	<b>recent</b>
<b>proving</b>	80:5 83:9,10,	111:2	14:5 47:23,25	27:22 28:10,
73:8	14,23 87:4	<b>raising</b>	110:20	11
<b>publications</b>	90:10,24	111:22	<b>reading</b>	<b>recently</b>
99:19	92:24 94:24	<b>rang</b>	110:20	31:6 103:6
<b>pull</b>	95:9 97:1	34:1,24 36:9	<b>ready</b>	<b>recess</b>
58:2	101:4 105:22	<b>Rao</b>	24:7	40:14 77:22
<b>pulled</b>	107:3,4,22	99:3,21	<b>real</b>	104:16
34:5	108:19 112:7	100:20,23,24	<b>reaske</b>	<b>recited</b>
<b>purpose</b>	128:11	101:2,5	30:12	110:3
78:22 79:6	<b>questioning</b>	<b>read</b>	<b>recognition</b>	34:14
<b>pursuant</b>	76:24	16:6,25 17:10	74:14	34:14
6:11	<b>questions</b>	18:20 33:24	<b>reasonable</b>	<b>recognized</b>
<b>put</b>	4:8 8:5 14:4	34:1,2,19	49:16 50:13	99:20
15:9 19:12,	128:7,25	36:8 42:10	<b>reasoning</b>	<b>recollection</b>
21,22 47:18	<b>quick</b>	43:19,25	103:15	10:15 28:11
86:1 88:7	128:11	44:2,10 45:20	<b>reasons</b>	29:12 31:21,
93:3,11,14	<b>quickly</b>	47:21 50:2	74:11,13	23 103:10
	6:2	60:15,23	75:16	125:14
	<b>quotations</b>			129:11

## DR. DONALD TURNBULL

August 30, 2024

<b>record</b> 5:3,15 6:10, 11,13 7:13 38:15 39:16 40:8,13,16 77:17,21,24 82:12,15,16, 20 104:12,15, 18 129:21 130:5,11,16	<b>refers</b> 64:8 <b>reflected</b> 54:4 <b>refresh</b> 30:24 125:14 <b>refreshed</b> 129:10 <b>related</b> 20:15 30:6 36:13,19 45:5 <b>refer</b> 67:13 76:18 86:15,19 87:12,19 88:2,7 95:15 102:14 107:25 113:15 119:3 <b>referenced</b> 125:17 <b>references</b> 33:21,24 34:21 35:17, 23,25 36:5,12 37:16,20,22 38:15,21,25 39:9 98:3,19 122:6,10,17 <b>referred</b> 12:11 44:11 91:13 95:4 122:24 128:18 <b>referring</b> 14:1 22:1 56:24 57:21 66:19,23 68:8 77:13 93:18 95:20 101:14 103:7,8 107:2 124:21	42:12 43:2 64:8 <b>relies</b> 108:10 <b>rely</b> 13:20 15:1,2, 21 16:16 39:23 42:25 43:5 52:18 55:4 98:11 <b>relying</b> 109:15 <b>remember</b> 7:9 16:18 17:15,16 19:13 22:12 28:19 30:6, 15,17,21 31:2,10,18 35:7 36:9,12 37:21 38:16 39:18 40:7 55:20 76:19 99:4,22 <b>relationships</b> 65:10 <b>relative</b> 103:2,4,6 104:4 125:3, 16 <b>relevance</b> 102:24 <b>relevant</b> 16:1 19:10 40:4 53:25 54:9,10 55:10 57:9 85:10 100:7 102:3 <b>reliance</b> 98:14 <b>relied</b> 33:7 39:4,10	49:7 <b>reorient</b> 28:18 <b>repeat</b> 59:18 <b>rephrase</b> 80:15 <b>replow</b> 83:1 <b>report</b> 14:8,11 15:3 16:2,17,18, 20,23 17:25 18:6,12,15,18 19:1,4,16 21:10,11 23:8 32:7,19 33:1, 2,6 39:24 40:1 41:23 43:3,14 44:20 45:11,14 46:5,22 47:19 51:24 52:3 53:2 54:14 55:23 56:11, 16,20 57:10 59:25 60:8,22 65:25 66:7 75:5,22 78:17 79:3 81:15 85:22 88:10 112:1,20 118:8,13 123:5 <b>remembered</b> 98:13 <b>reminded</b> 93:18 <b>reminder</b> 47:12 <b>remotely</b> 5:10 6:23 <b>removal</b> 11:7,16 12:11 <b>render</b>	49:7 <b>represent</b> 7:11 13:13 26:25 42:20 43:10 <b>represented</b> 16:8 18:8 <b>representing</b> 5:21 6:1 57:18 <b>represents</b> 14:6 48:7 <b>reproduced</b> 56:20 <b>require</b> 82:3 83:10, 13,16,24 84:5 <b>required</b> 49:17 50:14, 22 51:17 73:18,19 <b>requirement</b> 49:14 50:6 <b>research</b> 5:6,7,21 7:12 28:3 100:13 <b>respond</b> 83:11 <b>response</b> 12:5 72:12 <b>rest</b> 68:1 76:9 97:6 117:10 <b>result</b> 76:15 77:3 81:19 83:4 84:25 85:3,4, 6 <b>results</b>
--	--	--	--	---

## DR. DONALD TURNBULL

August 30, 2024

84:14	<b>Robert</b>	<b>scientist</b>	112:15,16	60:5
<b>retained</b>	3:4 5:22	16:5 33:9	<b>sentence</b>	<b>shorthand</b>
17:12,21	129:20 130:7	<b>scientists</b>	10:6,16	6:9 57:20
27:3,8	<b>Romana</b>	100:24	19:11,23	<b>shortly</b>
<b>returned</b>	100:24	<b>scope</b>	31:12 67:17	9:15 29:5
17:21	<b>ROSS</b>	48:11 62:23	68:2,6,12	76:23
<b>returning</b>	3:5	63:5 90:19	69:2 76:9	<b>show</b>
62:22 68:11	<b>rough</b>	97:5 111:3	80:25 90:16	54:16 122:11
70:22	130:2	125:22	92:15 93:2	<b>shows</b>
<b>reveal</b>	<b>roughly</b>	<b>screen</b>	109:5 127:22	54:11
10:25	28:1	129:7	<b>sentences</b>	<b>sic</b>
<b>review</b>	<b>rows</b>	<b>scroll</b>	10:21 12:11	94:25 112:10
16:1,25 18:20	126:24	98:25 124:18	31:15	124:11
21:5,22 22:16	<b>rules</b>	<b>scrolled</b>	<b>separate</b>	<b>signature</b>
29:1 33:10,21	14:23	25:8 34:8,23	88:6 113:18	25:9 26:5
37:2 38:8,13	<b>Rumsey</b>	<b>scrolling</b>	<b>serve</b>	<b>signed</b>
39:15 128:15,	5:12 6:9	34:13,16	17:12	124:21
24	<b>Russ</b>	<b>searching</b>	<b>served</b>	<b>significantly</b>
<b>reviewed</b>	3:9 5:20	34:13	37:23	18:21
14:3 21:4,20,	<b>RVINCENT@</b>	<b>section</b>	<b>service</b>	<b>similar</b>
25 23:1,5	<b>GIBSONDUN</b>	6:24 14:8	60:16 61:6,7	45:5
29:5,21 30:3	<b>N.COM</b>	27:10 34:20	65:15,18	<b>similarity</b>
31:3 32:18	3:6	46:22 56:22	66:4,12,16	45:8
33:16 34:7,21	<b>S</b>	57:1 85:22	67:2,19	<b>Simple</b>
52:20 55:6,8	<b>Samsung</b>	87:12 88:5	114:16,24	123:14
98:5 99:10	28:4,6	90:7,13 94:22	117:21	<b>simply</b>
100:19	102:11,13	98:1 107:24	<b>services</b>	75:20 76:6
101:22 127:7	103:11	111:20 112:3	5:8 36:14,16	<b>single</b>
129:11	124:11	113:17 118:8,	99:6,23	13:10
<b>reviewing</b>	125:10,25	16,20,21,25	<b>session</b>	<b>sitting</b>
22:6 29:25	127:2,9	125:7	21:5,22	10:10 19:7
53:11	<b>selected</b>	56:17	<b>set</b>	20:9 28:12
<b>rhetorical</b>		56:17	16:13 17:10	30:1 33:13
112:8	<b>school</b>	<b>send</b>	<b>sets</b>	38:11 55:12
<b>rings</b>	100:25	24:3 59:4	88:2	122:21
28:17 30:25	<b>science</b>	<b>sense</b>	<b>share</b>	<b>situation</b>
99:2	69:22 100:3	17:8 64:24	97:23	68:18 82:6
<b>risk</b>	123:12	67:10 74:24	<b>short</b>	
83:1		84:7 90:2	54:25 59:22	

## DR. DONALD TURNBULL

August 30, 2024

83:16	54:7,8,17	<b>standards</b>	82:1,11 97:13	<b>submitted</b>
<b>skill</b>	74:12 75:15	14:19 15:14,	101:10	8:23 9:1,11
49:23 69:12	85:18 90:25	20 16:13,16,	120:13	13:2 18:4
71:17 72:13	96:20 98:8	19 42:23,24	129:20,24	19:16 25:6,22
74:1,5,9 90:4,	100:8 109:17	46:22 47:24	130:1,4	28:22 33:5
11 91:2 96:3	111:15	51:18		125:1,15
117:11 121:4	118:22,23	<b>standpoint</b>	6:10	<b>submitting</b>
122:4,25	122:23	48:23,25		32:19 33:2
125:8	<b>specifically</b>	<b>stands</b>	85:11	<b>subsection</b>
<b>skilled</b>	15:13 30:23	102:10		52:14 54:20,
119:25	36:12 38:17	<b>start</b>	72:7	22 107:3
<b>skills</b>	47:25 54:11	43:25 79:2		<b>subsequent</b>
15:10 16:4,21	67:14 98:10,	94:16	21:8	113:3
98:15 123:9	20 99:4	<b>started</b>		<b>subsequently</b>
<b>skim</b>	101:24	17:16,18 75:9		24:11,13
34:3	109:24	<b>starting</b>	69:3 76:21	59:7,9 68:2
<b>slower</b>	115:20 118:6	5:17 27:13		76:11 124:13
44:1	<b>specification</b>	52:9 53:5		<b>substance</b>
<b>software</b>	44:7 63:10	60:14 109:3		9:25 11:10
49:3 50:25	91:16,17 92:4	<b>state</b>	14:15 80:1	12:9,18 39:24
73:11,16	97:23	46:24 47:2	103:9	41:2,5,9,13
119:23	<b>specifics</b>	<b>stated</b>		78:9
<b>someplace</b>	74:5	15:3 42:25		<b>substantial</b>
126:24	<b>speculate</b>	43:3,5 55:11		13:11
<b>sort</b>	102:23	70:1		<b>substantially</b>
10:13	<b>spend</b>	<b>statement</b>		12:19 32:5
<b>sound</b>	16:23 18:17	19:5 20:11,20		<b>substantive</b>
7:16 9:9,18,	<b>spoken</b>	63:9		10:3,11 12:5
19,23 123:22	50:3	<b>statements</b>		<b>substantively</b>
<b>space</b>	<b>spotlit</b>	90:23		53:6
32:4	6:3	<b>STE</b>		<b>successful</b>
<b>speak</b>	<b>spotted</b>	3:5		60:17 61:20,
78:4	6:3	<b>stenographer</b>		23 62:2,9,10,
<b>speaking</b>	64:25	6:8 10:23		19,23 63:5,17
11:20,25	<b>stand</b>	24:8 29:14		64:1 67:24
42:24	29:10 72:15	30:10 40:9		68:8 70:7
<b>specific</b>	<b>standard</b>	43:23 46:25		81:2,13,20
16:2 49:4	14:8 48:1	56:9 70:13		82:6 83:5,17
		77:18 78:24		85:19

## DR. DONALD TURNBULL

August 30, 2024

<b>successfully</b> 63:14	<b>T</b>	<b>talks</b> 65:15	89:3,6,11,19, 22,25 90:3,25 91:1 92:9,12 93:9 97:22,25 101:8,18	31:13 93:19 <b>testify</b> 8:22
<b>succinct</b> 47:12 111:8	<b>T-MOBILE</b> 5:6 9:5,6,11, 17 13:2 17:13	<b>task</b> 99:9 122:23	91:1 92:9,12 93:9 97:22,25 101:8,18	<b>testifying</b> 8:2,13
<b>sufficiently</b> 49:5,20 50:16,19 51:9 62:24 63:6	<b>takeaways</b> 19:1 24:24 25:7 33:6	<b>taught</b> 71:18 73:24	102:18 103:4 105:6,17	<b>testimony</b> 7:25 12:23 26:21 29:8,10 41:2,9 72:19 78:9
<b>suggest</b> 48:10	<b>Tech</b> 127:9	<b>teaching</b> 73:20	106:4,14,17, 18 107:1,5,9, 23 108:20	
<b>suggested</b> 15:11 116:25 117:2	<b>taking</b> 32:4 54:9	<b>Tech</b> 100:25	109:16,18 114:8,10,21	<b>testing</b> 8:2
<b>suggesting</b> 48:7	<b>talk</b> 12:22 31:19	<b>technical</b> 16:11,14,17	116:3 117:13 119:6,16,19, 21,25 120:7,9	<b>Texas</b> 7:14
<b>suggests</b> 109:6 111:11 112:12 113:7	<b>32:3 55:22</b> 67:10,22	<b>talk</b> 42:13 47:6,13	121:3,11 122:5 123:2	<b>text</b> 125:10
<b>summary</b> 31:22 52:6,15 55:1	<b>68:13 81:18</b> 89:2	<b>74:11,12,14</b> 75:15,18,20	126:1,2 127:24	<b>textbooks</b> 100:16
<b>support</b> 94:21,25	<b>talked</b> 18:5 25:21	<b>82:25 89:19,</b> 24 119:19	<b>terms</b> 30:22 37:9	<b>that'd</b> 26:15
<b>supports</b> 32:22 123:1	<b>70:6 85:25</b> 104:3 118:5,7	<b>Technologies</b> 27:4	<b>43:20 44:4,6</b> 45:13 46:10,	<b>thing</b> 37:19 45:5 54:8 70:20
<b>suspect</b> 14:22 22:5 34:11 37:4 38:19 39:18 47:10	<b>123:15</b> 126:23 128:12	<b>telling</b> 53:23 73:19	17,18 49:2 52:22 53:8, 14,17 54:3	73:17 85:17
<b>swear</b> 6:6	<b>talking</b> 10:12 49:3	<b>tells</b> 35:21	<b>56:8,12 57:9</b> 58:24 70:4	93:3 99:9
<b>syncing</b> 109:21	<b>50:25 56:5</b> 67:5 68:12,16	<b>term</b> 36:15 40:7	<b>80:25 86:1,</b> 12,23,25	<b>things</b> 13:11,16,19
<b>system</b> 73:3	<b>69:1,2 75:5,6</b> 77:15 83:3	<b>44:14 46:2,13</b> 48:19,21,23	<b>87:6,11,17,</b> 20,23,25	17:6 21:18
<b>systems</b> 76:3	<b>84:12 89:1</b> 90:9,14	<b>49:1,6,8</b> 50:20 55:22	<b>88:2,6,14,24</b> 90:17 94:22	34:9 65:11
	<b>93:13,15</b> 99:5,14	<b>56:2 57:4,21</b> 58:7 60:21,25	<b>95:18 96:21</b> 98:19 102:2	72:17,20
	<b>107:25</b> 108:14 109:8,	<b>61:10,14,16</b> 62:13 73:25	<b>104:2 113:15</b> 119:4 121:20	75:20 76:4, 15,17 77:8
	<b>25 110:9</b> 112:4 115:10,	<b>74:15 76:8</b> 79:21 81:6,9,	<b>123:10,19,24</b> 126:13,20,23	84:8 87:14
	<b>12 116:20</b> 117:24 118:3,	<b>10,13 86:6,7,</b> 8,19 87:14	<b>127:2 128:4</b> <b>testified</b>	95:20 98:16 99:13 100:12
	<b>18 121:13</b>	<b>88:22,25</b>	<b>6:24 7:20</b>	103:6 112:17

## DR. DONALD TURNBULL

August 30, 2024

122:3 123:11, 13	13,16 96:10 128:19	59:24 60:7 65:9	17:9 <b>TX</b> 3:5	50:12 51:3 53:14 57:14 70:9 71:23 72:19 75:25 86:22 88:5 91:11 95:8, 18,22 96:2,8, 21,25 97:22, 24 102:24 107:4,6,7 108:17 110:10 112:7, 18 113:2,11, 22 114:5 115:4 116:2 120:24 122:4 129:12
<b>thinking</b> 8:13 43:9 75:21 116:15 117:8	<b>title</b> 36:2 <b>titles</b> 122:14,16,18	<b>truthfully</b> 8:13 <b>turn</b> 25:11 26:1,4, 14 32:7 41:22 43:13 45:13 46:4,21 52:3 55:25 60:10, 13 65:13 78:16 81:15 85:22 101:8 105:3 125:6 126:6 128:2	<b>type</b> 13:10,12 65:2 69:16 91:10 117:1,3,25 118:14 <b>typed</b> 13:12 <b>types</b> 33:12 66:20 67:19 71:5, 13,14 77:8 91:13	
<b>thought</b> 15:9 48:9 58:19 65:8 75:1 77:13 126:22	<b>today</b> 5:11 7:18,25 8:13 18:3 19:18 20:9 21:6 28:12 33:13 96:10 122:22 128:19			
<b>thoughts</b> 13:13	<b>today's</b> 21:3	<b>turnaround</b> 129:23	<b>U</b>	<b>understandab</b> <b>le</b> 14:5
<b>throat</b> 101:12	<b>toggling</b> 21:17	<b>Turnbull</b> 4:16,18 5:5 6:3,21 7:3 12:9 21:7,19 24:2,23 25:1, 15,20 31:11 32:2 40:18 41:22 54:6 59:18,23 60:6 64:21 71:25 75:3 78:2,16 82:18,23 93:20 98:2	<b>U.S.</b> 59:20 60:3	<b>understandin</b> <b>g</b> 14:19 15:1 18:10 42:18, 21,25 44:16 47:3,8,10,15 48:8 52:22 54:2 58:25 69:1,22 70:7 87:11 91:7 97:8 98:18 112:9 117:12 123:13
<b>throttled</b> 68:3 76:12 77:2	<b>top</b> 16:24 19:13 23:12 44:24 80:24 100:22 101:6 102:1 103:5 119:5		<b>Uh-huh</b> 36:17 70:23 86:3	
<b>tied</b> 51:6			<b>uncertainty</b> 110:3	
<b>time</b> 14:22,24 16:2,21 26:24 27:24 29:3 31:9 33:5,10 34:11 36:20 40:12,15 77:20,23 82:14,19 104:14,17 113:7 122:2 127:4 130:10, 15	<b>topic</b> 36:18 <b>transcribed</b> 128:21		<b>uncertified</b> 130:2	
	<b>transcript</b> 29:2 128:13 129:21 130:2		<b>unclear</b> 8:9	
<b>times</b> 5:15 7:20,22 10:18 35:7 38:1 89:12,	<b>travels</b> 63:14		<b>uncommon</b> 121:23 123:4	<b>understood</b> 16:9 111:1
	<b>trial</b> 7:23		<b>underlying</b> 14:23	113:5
	<b>true</b> 25:5,20 26:12		<b>understand</b> 7:18,24 8:4,6	<b>unfair</b> 129:8
			<b>turning</b> 33:18	<b>unfamiliar</b> 91:2 120:8, 11,21
			<b>two-week</b> 43:20 44:3 45:4 48:14	

## DR. DONALD TURNBULL

August 30, 2024

<b>universe</b> 75:19	<b>V</b>	12:3 13:8 14:12 15:4, 17,23 18:2,11	34:3 <b>Wang</b> 3:9 4:5 5:19, 20 6:19 7:2	130:12,14 <b>wanted</b> 20:4 68:22 128:22
<b>University</b> 99:5	<b>vague</b> 82:9 89:21	20:13 21:6 23:20 37:7	11:4,14,19 12:2,7 13:15	<b>ways</b> 73:23 118:17
<b>unknown</b> 90:4 119:24 120:3,6,7,10, 20 121:1,23 123:4	<b>vaguely</b> 91:8 121:2,4	40:5,10,22 41:3,10,15 43:1,7 45:6 48:4,16 49:9,	14:13 15:12, 19 16:10 20:16 23:25 24:5,9,17	<b>week</b> 17:7
<b>unknowns</b> 73:4	<b>Vancouver</b> 6:15	18 50:1,8,23 51:19,25 56:10 58:8, 14,22 64:7	29:15 30:11 37:11 40:8,17 41:1,7,11,19	<b>weeks</b> 9:13 17:7 129:24
<b>unreasonable</b> 99:12	<b>variations</b> 73:23	65:1,20 66:18,25 67:12 76:20	43:4,12,24 45:9 47:1 48:13,18	<b>wide</b> 73:24
<b>usage</b> 60:16 61:6,7 64:12 65:15, 18 66:4,12,16 67:2,19	<b>verb</b> 116:11 117:1	77:5,19 78:5, 11 79:17,22 80:4,11,21 82:4,13 83:12	49:13,24 50:4,9 51:2, 22 52:2 56:14 58:10,17	<b>WILSHIRE</b> 3:10
<b>user</b> 94:9,13 101:16 105:9 106:9,21 107:10 108:21 109:6, 9,19 110:3, 16,22 111:6, 12,13,18 112:24 113:8, 9 114:14,15, 17,18,19,23, 25 115:1 116:6,8,20 117:20,22,23 119:8,9,13, 16,19,25 121:8,13,16 123:2,3	<b>Verizon</b> 5:8 9:9,13,20 10:5,15 18:5, 8,14,15,18 19:17 25:16, 22 33:3	84:6 86:14 87:2,8,18 90:5 91:4 95:7,13 96:24 103:24 104:13 105:21 115:6, 17 116:13	59:2,17 64:11 65:4,21 66:21 67:4,15 70:14 76:23 77:1,10 78:1,8,13 79:1,19,24 80:6,14,23 82:2,12,18,22 83:15 84:10	<b>wireless</b> 5:8 45:22 56:4 57:12,24 58:6,12 60:18 61:2,20,24 62:3,9,10,20 63:6,14,18 64:2 67:20 68:8,20 69:5, 13 70:8,16 71:2,12 72:3, 9,24 73:7
<b>user's</b> 108:10	<b>versus</b> 5:6,7 28:4 120:5 124:11	117:5 120:12, 14,22 121:10, 18 122:9	86:17 87:5, 15,22 90:8 91:15 95:10, 23 97:9,14 101:15 104:1, 12,19 105:23 115:9,21	74:8 75:14 79:8,15 80:12,20 81:20 82:7 83:5,17 85:20 119:13
	<b>video</b> 6:4 40:13,16 77:21,24	128:10,25 129:5,19,22, 25 130:3,8,13	116:17 117:15 120:18 121:7, 14,21 122:12	<b>wished</b> 19:11
	<b>view</b> 6:4 111:4	<b>vu</b> 7:7	124:3,6,8,16 128:7 129:1, 3,9,18	<b>withdrew</b> 127:2
	<b>Vincent</b> 3:4 4:6 5:18, 22 6:17 10:24 11:8,17,24	<b>Wait</b> 40:11	<b>word</b> 19:12,21,22	
		<b>walk</b>		

DR. DONALD TURNBULL

August 30, 2024

49:19 53:10 58:9 64:4 84:12,21 85:10 87:4 89:14 92:16, 17,19,25 93:4,11,16 115:24 118:11 122:18	<b>written</b> 16:8 54:4 71:22 73:22 76:8 87:20 95:17 96:11 <b>wrong</b> 73:17 103:23 <b>wrote</b> 13:7	
<b>words</b>	<hr/> <b>Y</b> <hr/>	
53:19 61:5 63:22 64:15 117:8 118:11 120:5	<b>years</b> 100:4	
<b>work</b>	<b>Yi</b> 3:17 5:25	
14:20 15:11 17:24 18:11, 23 20:25 26:24 36:19 47:11,21 53:15 69:23 73:18 101:25 126:22	<b>York</b> 99:4	
	<hr/> <b>Z</b> <hr/>	
	<b>Zhang</b> 3:17 5:25	
<b>worked</b>	<b>Zoom</b> 3:1 7:24 23:14 24:3	
18:2 27:12 38:7 98:17	59:5 82:10	
<b>working</b>		
17:17,19 35:1		
<b>works</b>		
73:3		
<b>world</b>		
32:1		
<b>worse</b>		
96:21		
<b>wrap</b>		
76:23		
<b>writing</b>		
119:2		